ORDER NO. SD83062526C9

Service Manual

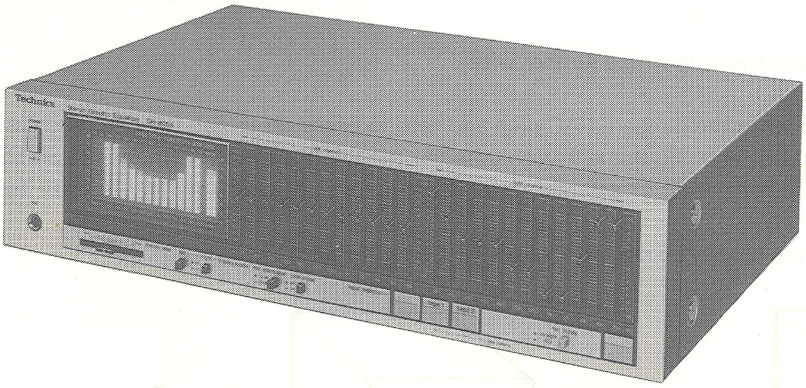
Stereo Graphic Equalizer

SH-8055

[E],[EK],[EF],[EB],[EH],[EGA],
[XA],[XL],[PA],[PE],[Ei]

SH-8055(K)

[E],[EK],[EF],[EB],[EH],
[EGA],[XA],[XL]



Areas

- * [E] is available in Scandinavia and Switzerland.
- * [EK] is available in United Kingdom.
- * [EF] is available in France.
- * [EB] is available in Belgium.
- * [EH] is available in Holland.
- * [EGA] is available in F.R. Germany.
- * [XA] is available in Southeast Asia, Oceania, Africa, Middle Near East and Central South America.
- * [XL] is available in Australia.
- * [PA] is available in Far East PX.
- * [PE] is available in European Military.
- * [Ei] is available in Italy.

* The colors of this model include silver and black.
* The black type model is provided with (K) in the Service Manual.

Specifications

(Specifications are subject to change without notice for further improvement.)

(DIN 45 500)

Frequency response (center position) : 5 Hz~100 kHz, −1 dB
Maximum output voltage : 8 V (1 kHz, THD 0.01%)
Rated output voltage : 1 V
Rated total harmonic distortion : 0.003% (20 Hz~20 kHz)
0.002% (1 kHz)
Input sensitivity : 1 V
Signal-to-noise ratio : 102 dB (110 dB, IHF' A)
Maximum input voltage : 8 V (1 kHz)
Input impedance : 47 kΩ
Gain : 0±1 dB
Channel balance 250 Hz~6300 Hz : ±0.5 dB
Channel separation 1 kHz : 70 dB
Band level controls : +12 dB~−12 dB
(12 elements continuously variable per channel)
Center frequency : 25 Hz, 40 Hz, 63 Hz, 100 Hz, 160 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz, 8 kHz, 16 kHz
Pink noise output voltage : 50 mV
Compatible microphone sensitivity : above −74 dBV/μbar (1 kHz)
Microphone attenuator : −20 dB

GENERAL

Power supply : AC 110 V/120 V/220 V/240 V, 50 Hz/60 Hz.
Power consumption : 17 W
Dimensions (H×W×D) : 108×430×270 mm
(4-1/4"×16-15/16"×10-5/8")
Weight : 4.1 kg (9.0 lb)

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Technics

Panasonic Tokyo
Matsushita Electric Industrial Co., Ltd.
1-2, 1-chome, Shiba-koen, Minato-ku, Tokyo 105 Japan

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

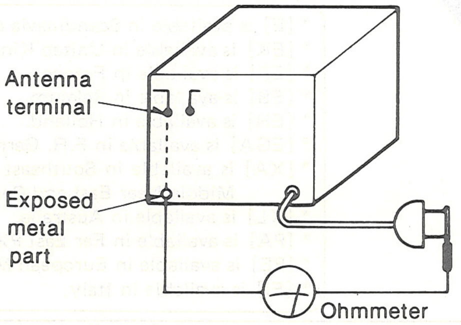
SAFETY PRECAUTIONS

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only manufacturer's recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

• INSULATION RESISTANCE TEST

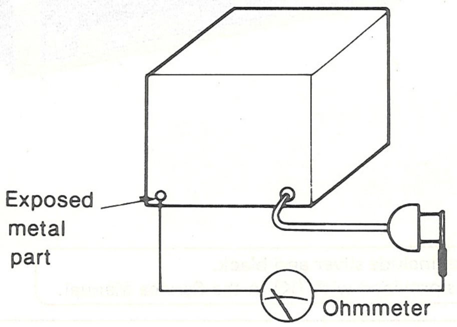
1. Unplug the power cord and short the two prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screwheads antenna, control shafts, handle brackets, etc. Equipment with antenna terminals should read between 3MΩ and 5.2MΩ to all exposed parts. (Fig. A) Equipment without antenna terminals should read approximately infinity to all exposed parts. (Fig. B)

Note: Some exposed parts may be isolated from the chassis by design. These will read infinity.


Antenna terminal
Exposed metal part
Ohmmeter

(Fig. A)

Resistance = 3MΩ—5.2MΩ

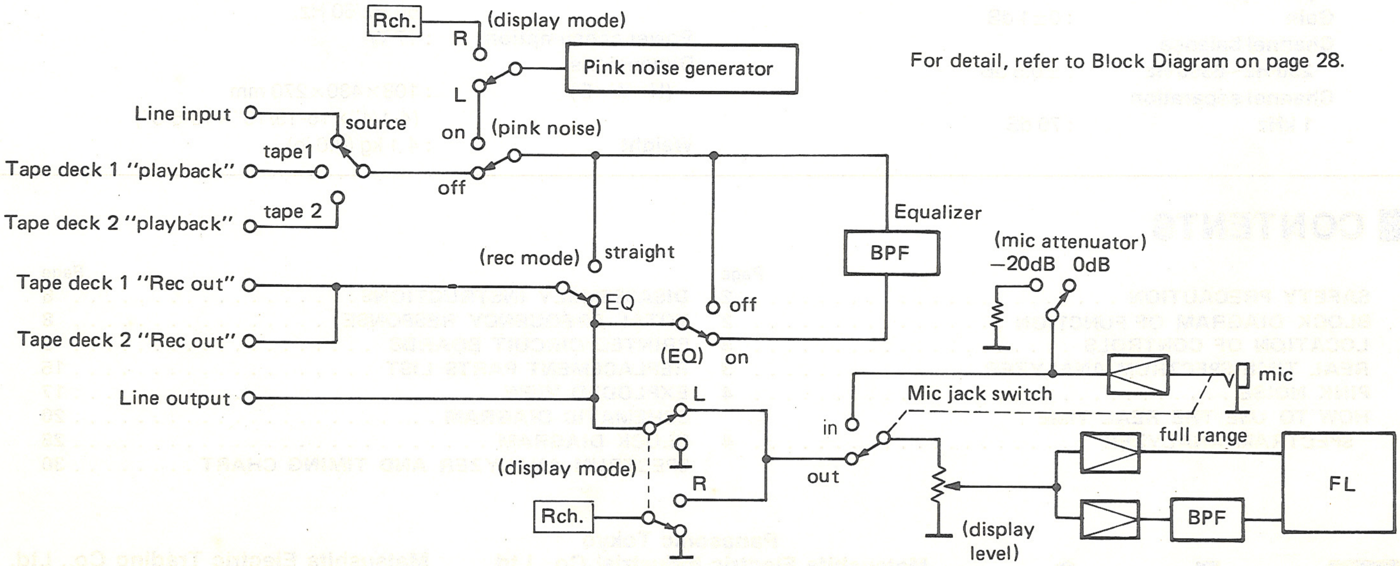

Exposed metal part
Ohmmeter

(Fig. B)

Resistance = Approx ∞

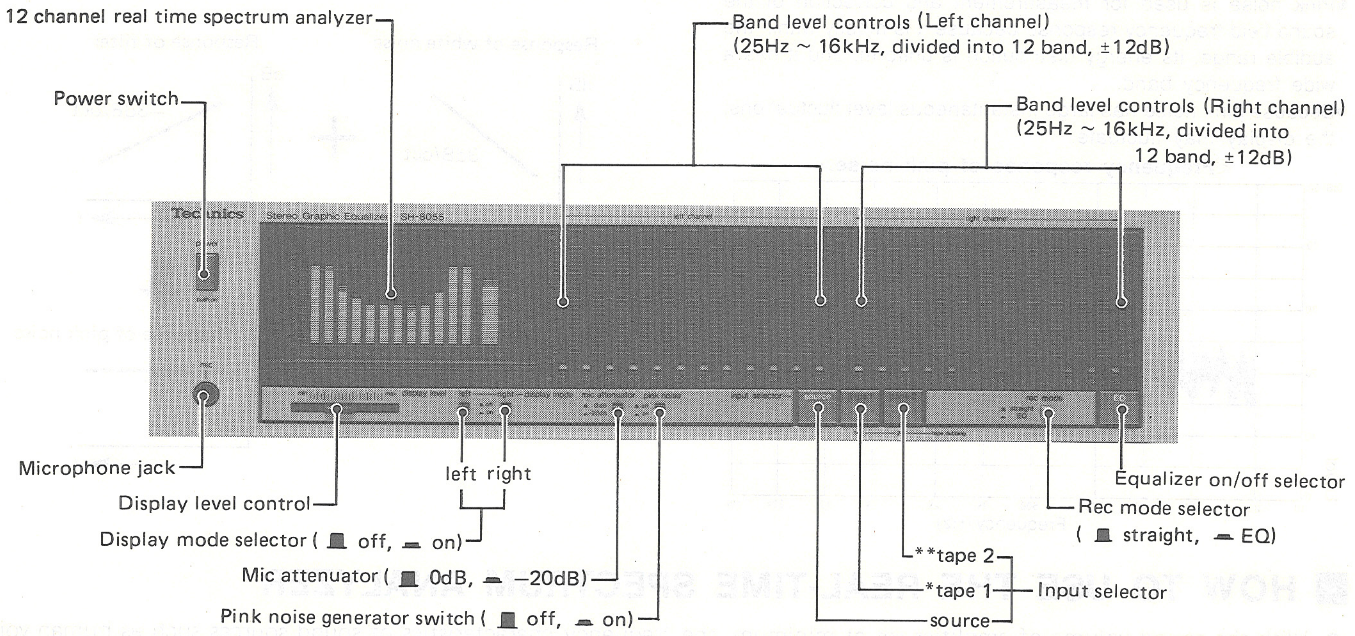
4. If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and rechecked before it is returned to the customer.

BLOCK DIAGRAM OF FUNCTION


Rch.
(display mode)
R
L
Pink noise generator
on
(pink noise)
Line input
source
tape1
Tape deck 1 "playback"
off
Tape deck 2 "playback"
tape 2
Equalizer
BPF
(mic attenuator)
−20dB 0dB
(rec mode)
straight
Tape deck 1 "Rec out"
EQ
off
Tape deck 2 "Rec out"
(EQ)
on
mic
Line output
L
Mic jack switch
in
full range
(display mode)
R
out
FL
Rch.
BPF
(display level)

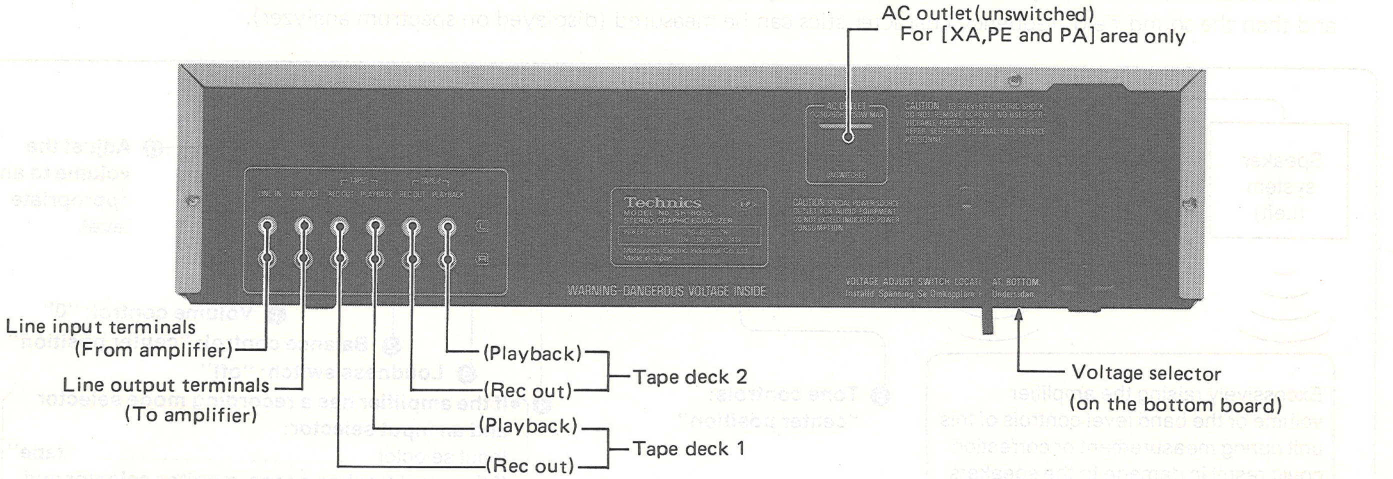
For detail, refer to Block Diagram on page 28.

■ LOCATION OF CONTROLS


12 channel real time spectrum analyzer
Band level controls (Left channel) (25Hz ~ 16kHz, divided into 12 band, ±12dB)
Power switch
Band level controls (Right channel) (25Hz ~ 16kHz, divided into 12 band, ±12dB)
Technics
Stereo Graphic Equalizer SH-8055
Microphone jack
left right
Display level control
Display mode selector (▮ off, ▬ on)
Mic attenuator (▮ 0dB, ▬ −20dB)
Pink noise generator switch (▮ off, ▬ on)
Equalizer on/off selector
Rec mode selector (▮ straight, ▬ EQ)
**tape 2
*tape 1
source
Input selector

*Mic Jack of this unit is not for mixing.

* Dubbing from tape deck 1 to 2 is possible with tape 1 switch.
** Dubbing from tape deck 2 to 1 is possible with tape 2 switch.


AC outlet(unswitched)
For [XA,PE and PA] area only
Technics
WARNING–DANGEROUS VOLTAGE INSIDE
Line input terminals (From amplifier)
Line output terminals (To amplifier)
(Playback)
(Rec out)
Tape deck 2
(Playback)
(Rec out)
Tape deck 1
Voltage selector (on the bottom board)

- The power supply for this unit varies depending upon the areas. Also, the parts used for power supply are different. So, refer to the circuit diagram and the replacement parts list.

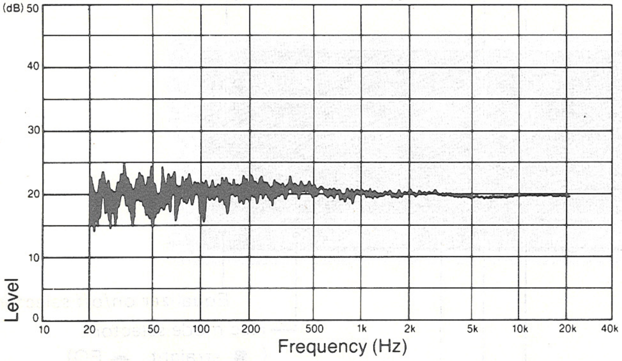
■ REAL TIME SPECTRUM ANALYZER

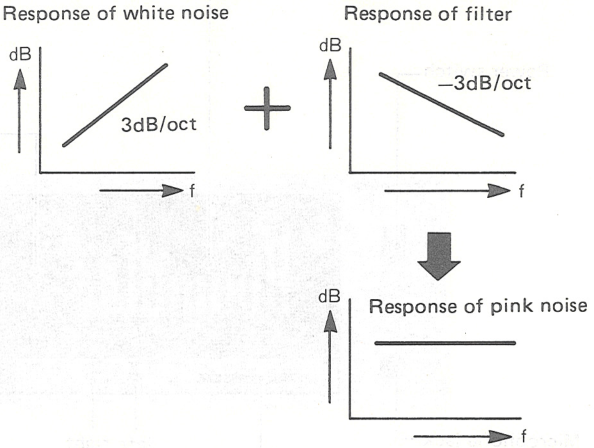
- This can be used to measure and correct the sound field frequency response of a listening room and to measure the frequency components of a sound source.
- The same 12-band frequency divider as for the band level controls allows the levels of the frequency components of voices, music, etc., to be visually displayed.
- The "full range" area on the right side displays the combined level of all of the frequency bands.
- The display is in 12 points for each frequency band and a level width of 30 dB can be displayed.
- The real time spectrum analyzer is connected to the output terminals of this unit. When the equalizer switch is "on", the level of the corrected source is displayed; when pink noise switch is "on", the level of the corrected pink noise is displayed; when the microphone is connected, the microphone input level is displayed.
- The attack time and recovery time of the display is fast for source and slow for pink noise; thus the responsiveness to the source is good and the display is easy to see during sound field correction.

PINK NOISE

- Pink noise is used for measurement and correction of the sound field frequency response because it is mostly within the audible range, its energy distribution is uniform, and it has a wide frequency band.
- Because pink noise has large instantaneous level fluctuations, the display may fluctuate.

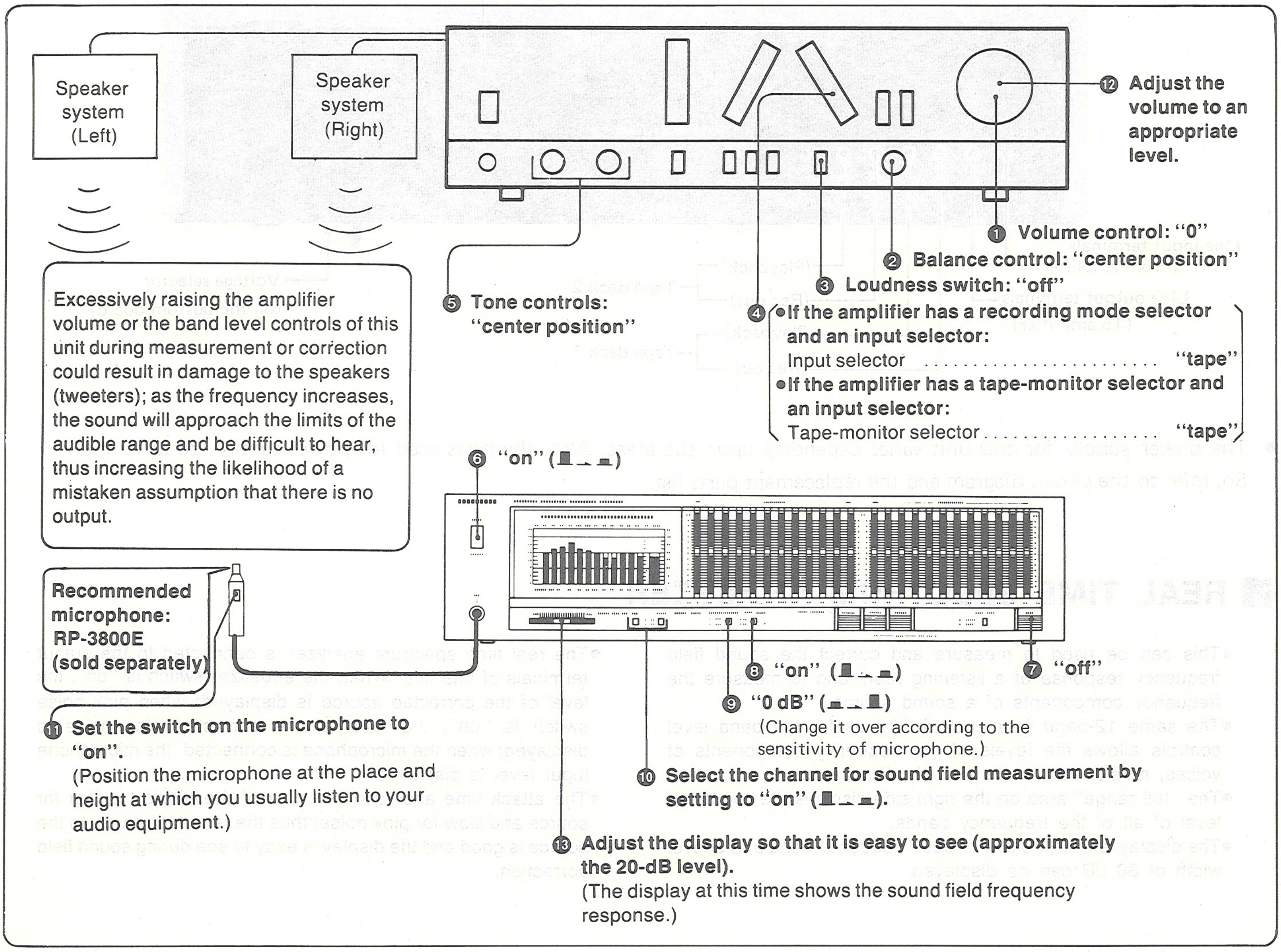
<Frequency response of pink noise>





HOW TO USE THE REAL-TIME SPECTRUM ANALYZER

- With the sound volume of amplifier set at minimum, the frequency characteristics of sound sources such as human voice, live music and noise can be measured (displayed on spectrum analyzer) through operations in numerical order as shown below.
- As the sound volume of amplifier is increased through operations as shown below, the sound volume of pink noise increases, and then the sound field frequency characteristics can be measured (displayed on spectrum analyzer).



① **Volume control: "0"**

② **Balance control: "center position"**

③ **Loudness switch: "off"**

④ **•If the amplifier has a recording mode selector and an input selector:**
Input selector .... "tape"
•If the amplifier has a tape-monitor selector and an input selector:
Tape-monitor selector .... "tape"

⑤ **Tone controls: "center position"**

⑥ "on" (▮ ▁ ▬)

⑦ "off"

⑧ "on" (▮ ▁ ▬)

⑨ "0 dB" (▬ ▁ ▮)
(Change it over according to the sensitivity of microphone.)

⑩ **Select the channel for sound field measurement by setting to "on" (▮ ▁ ▬).**

⑪ **Set the switch on the microphone to "on".**
(Position the microphone at the place and height at which you usually listen to your audio equipment.)

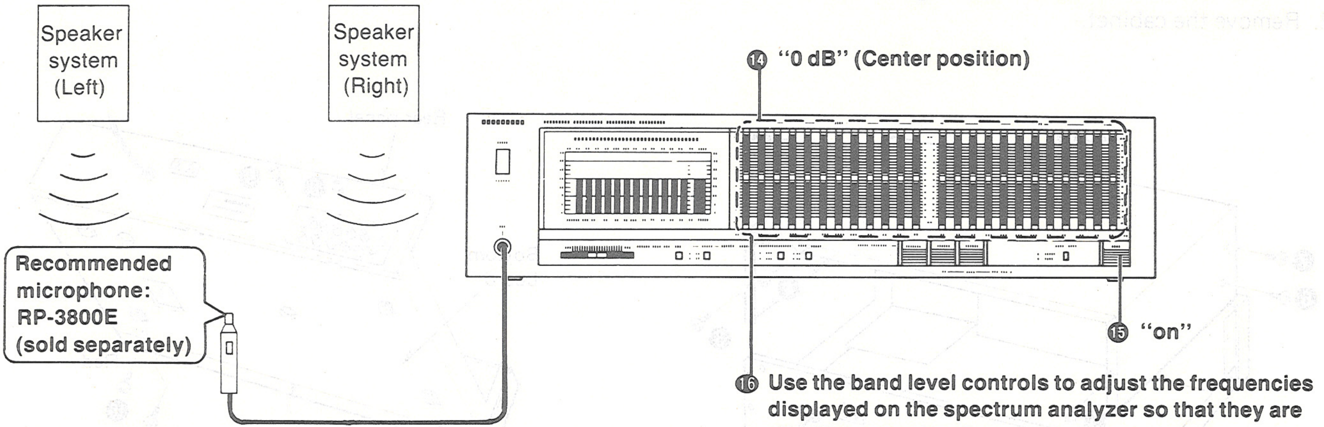
⑫ **Adjust the volume to an appropriate level.**

⑬ **Adjust the display so that it is easy to see (approximately the 20-dB level).**
(The display at this time shows the sound field frequency response.)

Excessively raising the amplifier volume or the band level controls of this unit during measurement or correction could result in damage to the speakers (tweeters); as the frequency increases, the sound will approach the limits of the audible range and be difficult to hear, thus increasing the likelihood of a mistaken assumption that there is no output.

Recommended microphone: RP-3800E (sold separately)

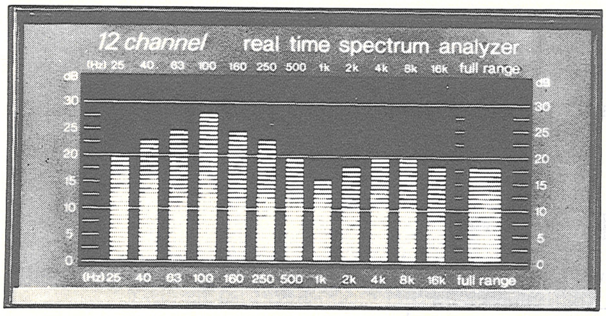
- Correct the sound field in order as shown below according to the data obtained through measurement on page 4.
- Correct is on each of the channels.


Speaker system (Left)
Speaker system (Right)
⑭ "0 dB" (Center position)
Recommended microphone: RP-3800E (sold separately)
⑮ "on"

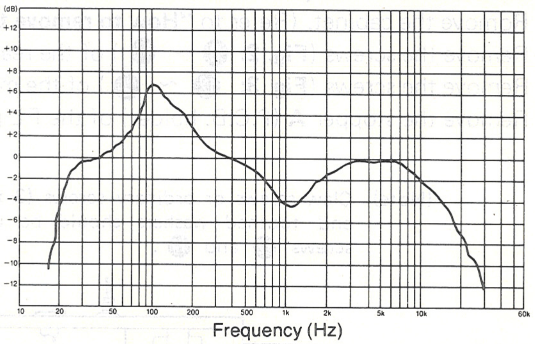
(Position the microphone at the same place and height as it was for the measurement.)

⑯ **Use the band level controls to adjust the frequencies displayed on the spectrum analyzer so that they are all at the same level.**
Make the adjustment so that the band level controls are centered around the "0 dB" position and are not set too far in either the "+ dB" or "– dB" direction.
(After adjustment, the positions of the band level controls are the ideal listening point.)

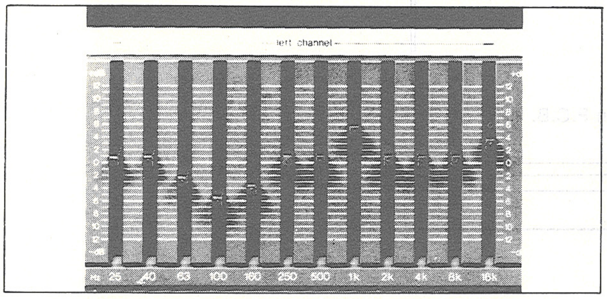
(Example of sound field frequency response obtained through measurement)


12 channel real time spectrum analyzer
(Hz) 25 40 63 100 160 250 500 1k 2k 4k 8k 16k full range
dB 30 25 20 15 10 5 0

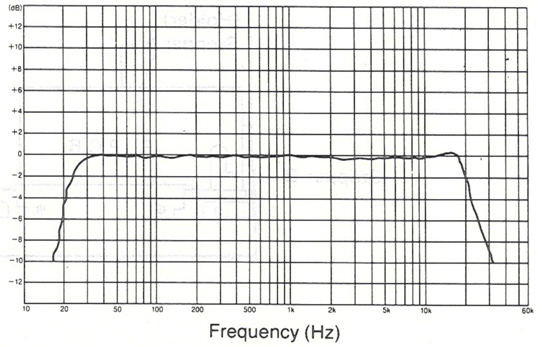
Frequency response prior to correction adjustment



(Position of the band level controls after correction adjustment)


left channel
Hz 25 40 63 100 160 250 500 1k 2k 4k 8k 16k

Frequency response after correction adjustment



- Depending on the listening room, it is not always possible to obtain a perfectly flat response for equalization correction.
- When making the correction adjustment, the spectrum analyzer display may not always visually agree with the positions of the band level controls.

<Microphone to be used with this unit>

The microphone that should be used with this unit is the RP-3800E (sold separately). If any other microphone is used, the frequency response displayed on the spectrum analyzer may differ from the actual sound field frequency response.

DISASSEMBLY INSTRUCTIONS

1. How to remove the cabinet

1. Remove the screws (**Fig. 1:** ① ~ ⑦) of the cabinet.
2. Remove the cabinet.

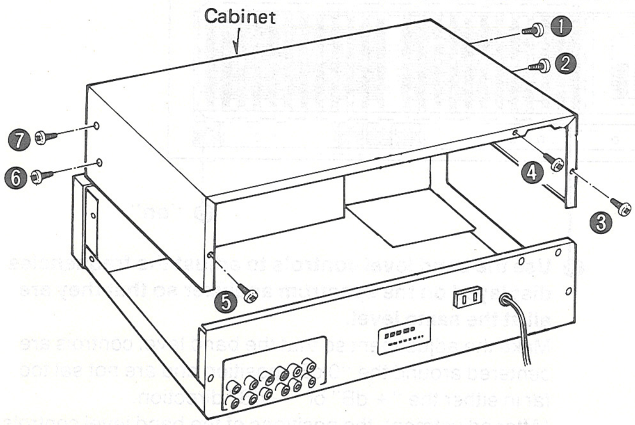

Cabinet
①
②
③
④
⑤
⑥
⑦

Fig. 1

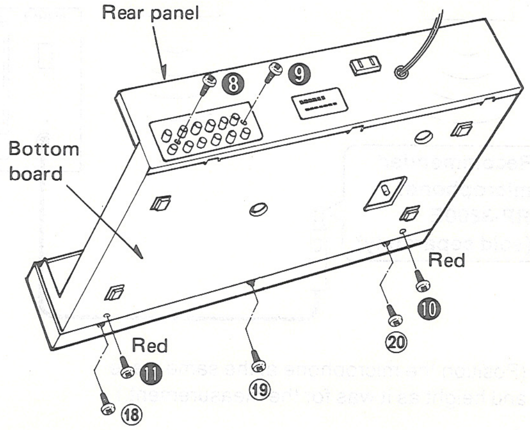
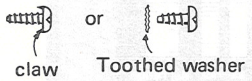

Rear panel
⑧
⑨
Bottom board
Red
⑩
⑳
Red
⑪
⑲
⑱

Fig. 2

2. How to remove the printed circuit board

1. Romove the cabinet. (Refer to **"How to remove the cabinet"**)
2. Remove the screws (**Fig. 2:** ⑧ ~ ⑪) of the rear panel and the bottom board.
3. Remove the screws (**Fig. 3:** ⑫ ~ ⑭) of the main printed circuit board.
4. Remove the stopper **A** (P.C.B. holder) of the FL printed circuit board. (Refer to **Fig. 4**)

(Note) Claw screws or ordinary screws (3 x 8 mm) and toothed washers should be used for screws ⑫ and ⑭.


or
claw
Toothed washer

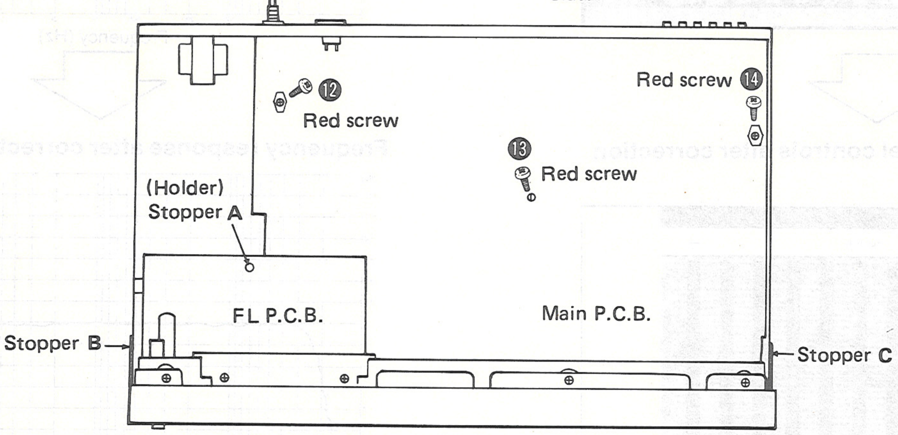

Red screw ⑭
⑫
Red screw
⑬
Red screw
(Holder)
Stopper A
FL P.C.B.
Main P.C.B.
Stopper B
Stopper C

Fig. 3

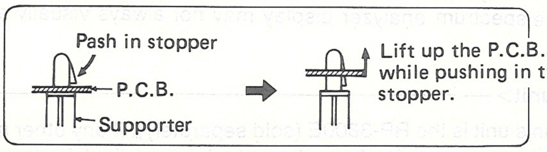
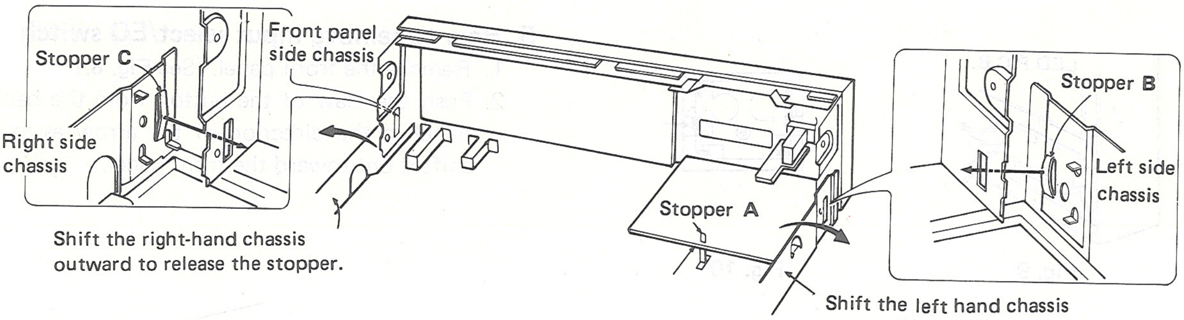

Pash in stopper
P.C.B.
Supporter
Lift up the P.C.B. while pushing in the stopper.

Fig. 4


Stopper C
Right side chassis
Front panel side chassis
Stopper A
Stopper B
Left side chassis

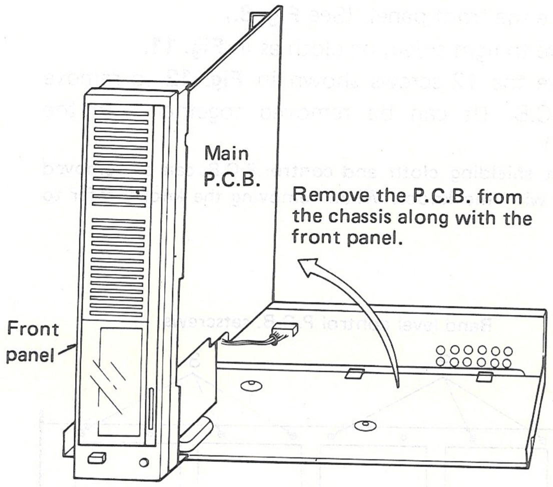
Shift the right-hand chassis outward to release the stopper.

Shift the left hand chassis outward to release the stopper.

Fig. 5

5. Shift the right and left chassises outward as shown in **Fig. 5** to release the stoppers **B** and **C** out of the chassis holes on the front panel side.
6. Slightly draw out the front panel toward you along with the P.C.B., then raise the chassis as in **Fig. 6** and check.

* When checking the voltage, removing screws ⑫ and ⑭ of **Fig. 3**, touch the ground side of circuit tester rod to the ground line of P.C.B. (power supply circuit terminal (3), etc.) because the chassis is not grounded.


Main P.C.B.
Front panel

Remove the P.C.B. from the chassis along with the front panel.

Fig. 6

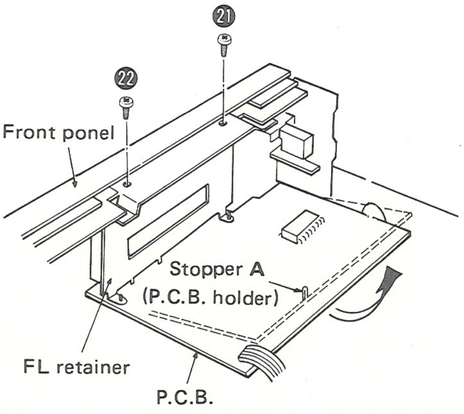

㉑
㉒
Front ponel
Stopper A (P.C.B. holder)
FL retainer
P.C.B.

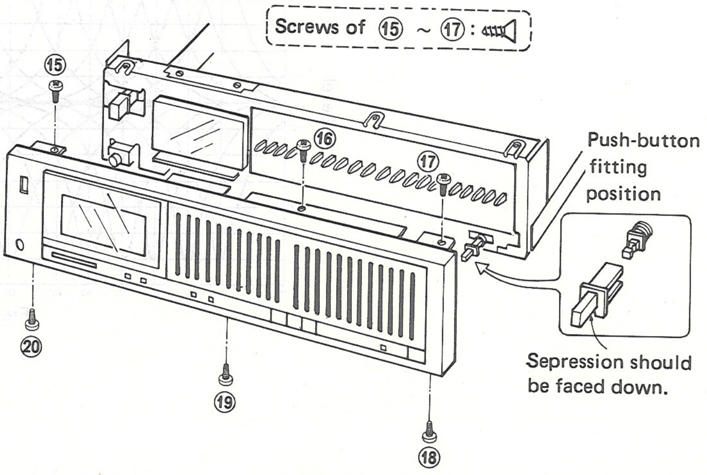
Fig. 7

3. How to remove the FL P.C.B.

1. Remove the cabinet. (See **Fig. 1.**)
2. Remove screws ㉑ and ㉒ as in **Fig. 7.**
3. Remove stopper **A**. (See **Fig. 4.**)
4. Remove P.C.B. together with FL from the chassis in the direction of the arrow in **Fig. 7.**

4. How to remove front panel

1. Remove the cabinet. (See **Fig. 1.**)
2. Remove screws ⑮ ~ ⑳ as in **Fig. 8.** (For screws ⑱ ~ ⑳, See **Fig. 2.**)
3. Remove the front panel from the chassis.
4. Input switch LED P.C.B. and EQ switch LED P.C.B. are fitted to the front panel. Release the claws as in **Fig. 9** to remove the P.C.B. from the front panel.


Screws of ⑮ ~ ⑰ :
⑮
⑯
⑰
⑱
⑲
⑳
Push-button fitting position

Sepression should be faced down.

Fig. 8

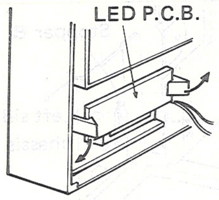


Fig. 9

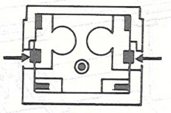


Fig. 10

5. How to remove input select/EQ switch

1. Remove the front panel. (See **Fig. 8.**)
2. Push the claw of the button from the back of front panel in the direction of the arrow as in **Fig. 10** to shift it out toward the front panel.

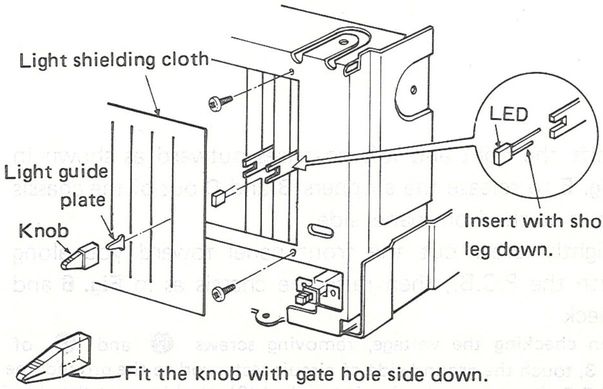

Light shielding cloth
Light guide plate
Knob
LED
Insert with short leg down.
Fit the knob with gate hole side down.

Fig. 11

6. How to remove band level control P.C.B.

1. Remove the front panel. (See **Fig. 8.**)
2. Remove th light shielding cloth as in **Fig. 11.**
3. Remove the 12 screws shown in **Fig. 12** to remove the P.C.B. (It can be removed together with the knobs.)

* The light shielding cloth and control P.C.B. can be removed together with the knobs. When removing the knobs, refer to Fig. 11.

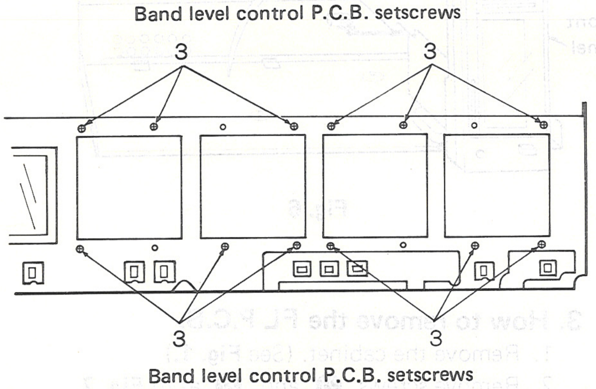
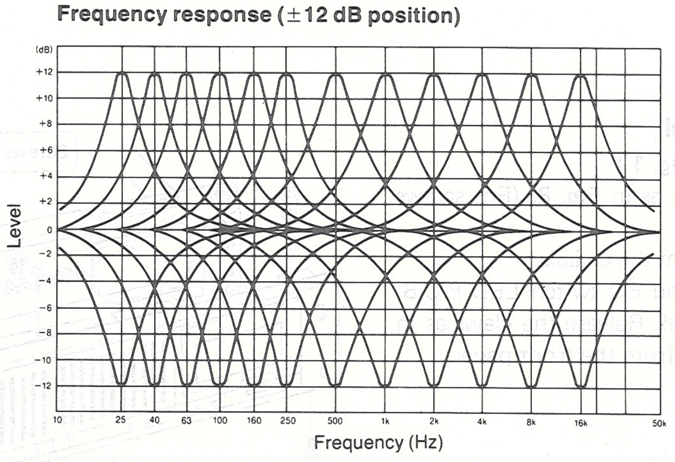

Band level control P.C.B. setscrews
3
3
3
3
Band level control P.C.B. setscrews

Fig. 12

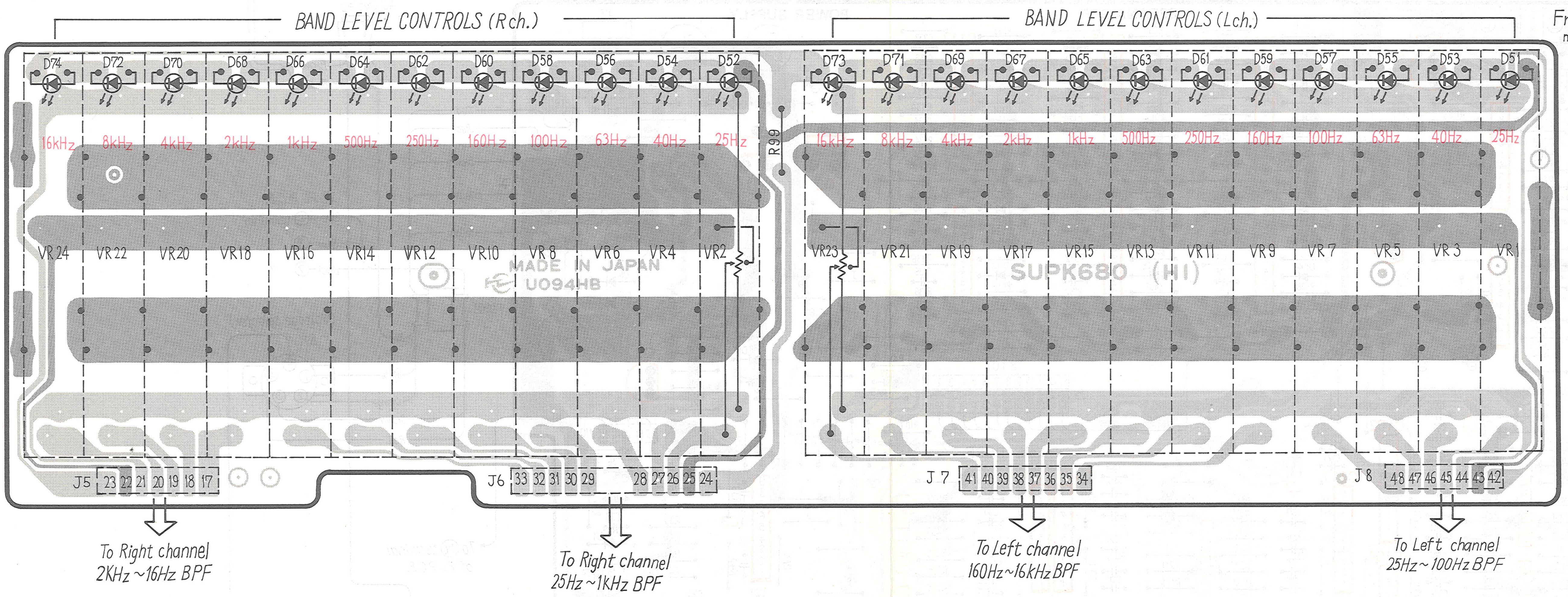
TOTAL FREQUENCY RESPONSE



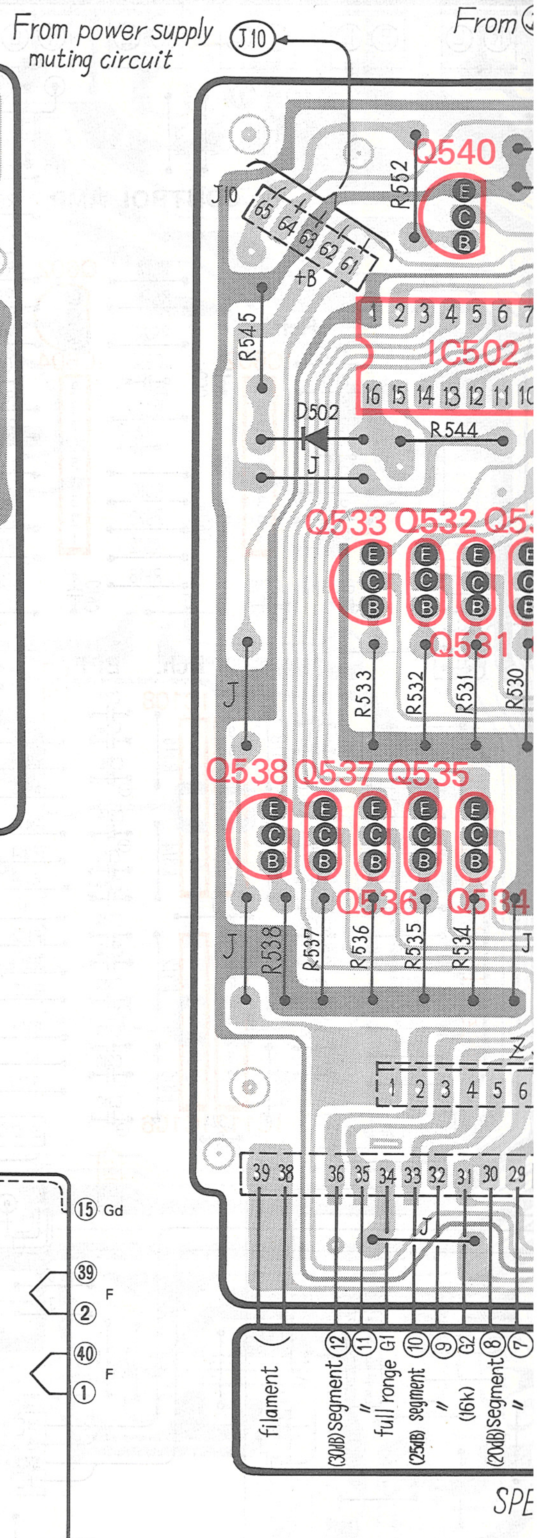
PRINTED CIRCUIT BOARDS

- Band level control P.C.B. of left and right channel

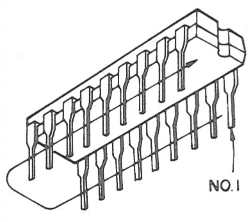
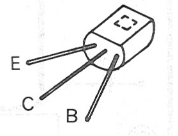
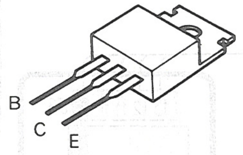
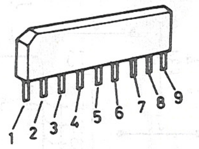
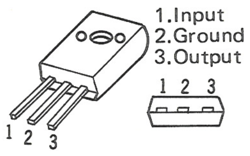
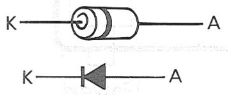
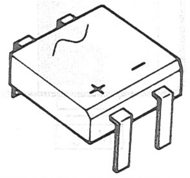
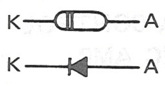
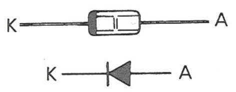
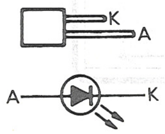
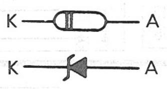
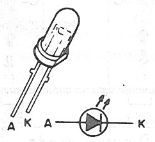
▨ Ground (Earth) lines


BAND LEVEL CONTROLS (Rch.)
BAND LEVEL CONTROLS (Lch.)
D74 D72 D70 D68 D66 D64 D62 D60 D58 D56 D54 D52
D73 D71 D69 D67 D65 D63 D61 D59 D57 D55 D53 D51
16kHz 8kHz 4kHz 2kHz 1kHz 500Hz 250Hz 160Hz 100Hz 63Hz 40Hz 25Hz
VR24 VR22 VR20 VR18 VR16 VR14 VR12 VR10 VR8 VR6 VR4 VR2
VR23 VR21 VR19 VR17 VR15 VR13 VR11 VR9 VR7 VR5 VR3 VR1
R99
MADE IN JAPAN
U094HB
SUPK680 (HI)
J5 23 22 21 20 19 18 17
J6 33 32 31 30 29 28 27 26 25 24
J7 41 40 39 38 37 36 35 34
J8 48 47 46 45 44 43 42
To Right channel 2KHz~16Hz BPF
To Right channel 25Hz~1kHz BPF
To Left channel 160Hz~16kHz BPF
To Left channel 25Hz~100Hz BPF

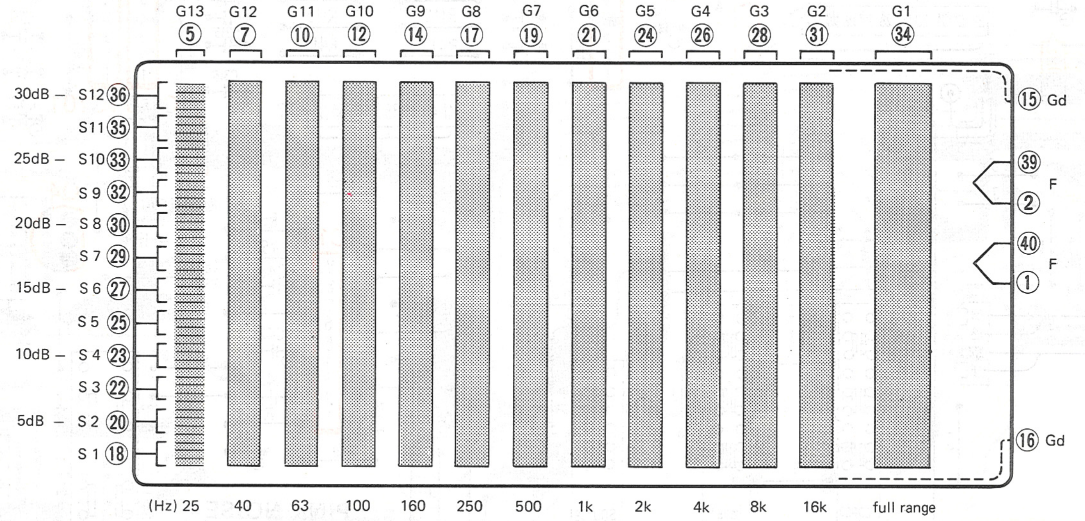
- Spectrum analyzer disp


From power supply muting circuit
From
J10
65 64 63 62 61
+B
R552
Q540
E C B
1 2 3 4 5 6 7
IC502
16 15 14 13 12 11 10
R545
D502
R544
J
Q533 Q532 Q53
Q531
R533 R532 R531 R530
Q538 Q537 Q535
Q536 Q534
R538 R537 R536 R535 R534
1 2 3 4 5 6
39 38 36 35 34 33 32 31 30 29
filament
(30dB) segment ⑫
⑪ full range G1
(25dB) segment ⑩
⑨ (16k) G2
(20dB) Segment ⑧ ⑦
SPE

- Terminal guide of transistors, diodes and IC's

SVIHA12010 16 pins SVIM54834P 22 pins	2SA564, 2SA921, 2SA1246,2SC1815, 2SC2878	2SB941, 2SD1265	SVINJM2043SE SVITA75559S
 NO.1	 E C B	 B C E	 1 2 3 4 5 6 7 8 9
AN78N12	SVD1SR35200F	SVD1B4B42	OA90 SVD1S2076
 1.Input 2.Ground 3.Output	 K A		 K A
MA27–W	LN251RCPP	MA1160	LN41YCPH, LN81RCPH
 K A	 K A	 K A	 A K

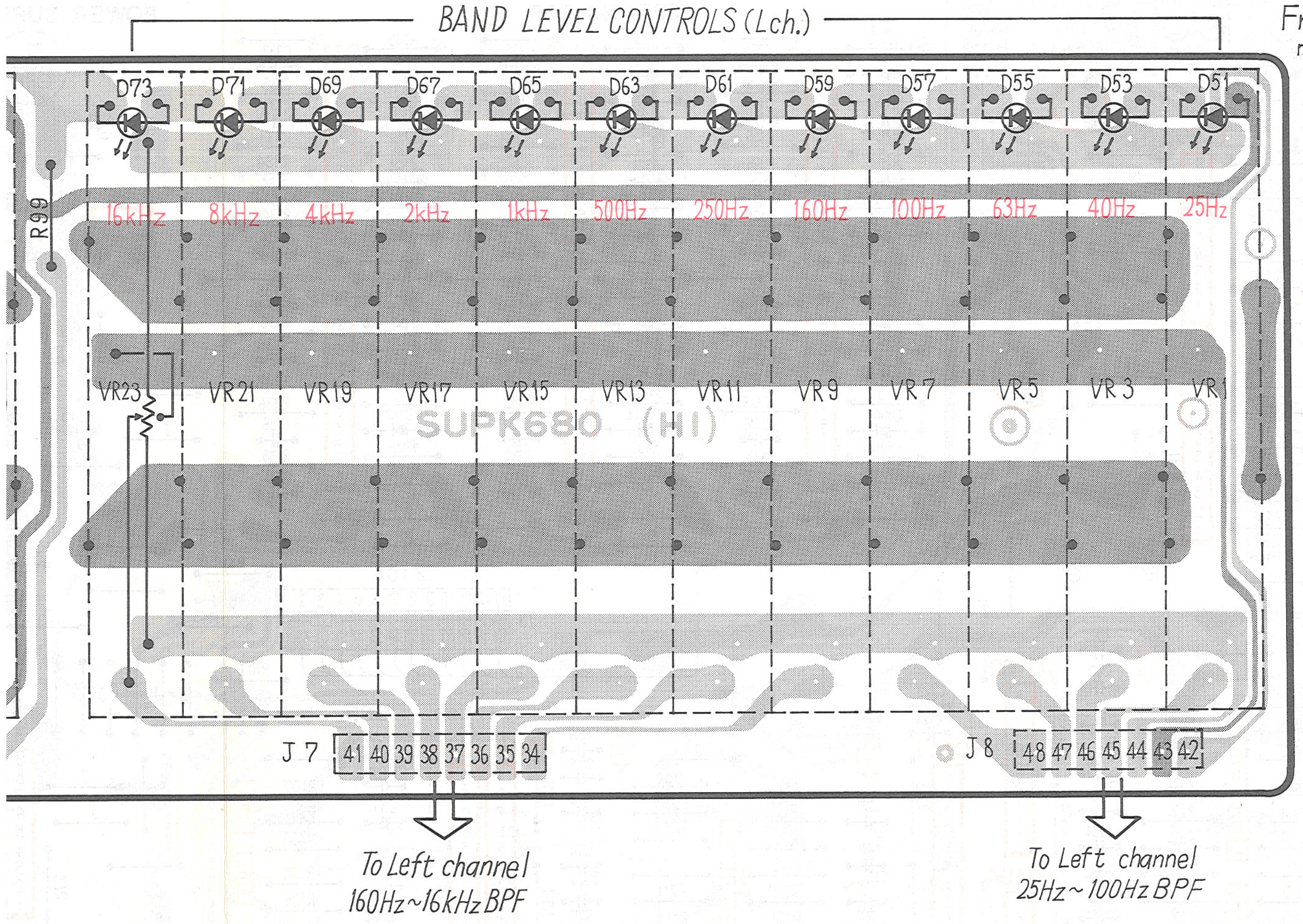
- Terminal number of FL (Spectrum analyzer)


G13 ⑤ G12 ⑦ G11 ⑩ G10 ⑫ G9 ⑭ G8 ⑰ G7 ⑲ G6 ㉑ G5 ㉔ G4 ㉖ G3 ㉘ G2 ㉛ G1 ㉞
30dB – S12 ㊱
S11 ㉟
25dB – S10 ㉝
S 9 ㉜
20dB – S 8 ㉚
S 7 ㉙
15dB – S 6 ㉗
S 5 ㉕
10dB – S 4 ㉓
S 3 ㉒
5dB – S 2 ⑳
S 1 ⑱
⑮ Gd
㊴ ② F
㊵ ① F
⑯ Gd
(Hz) 25 40 63 100 160 250 500 1k 2k 4k 8k 16k full range

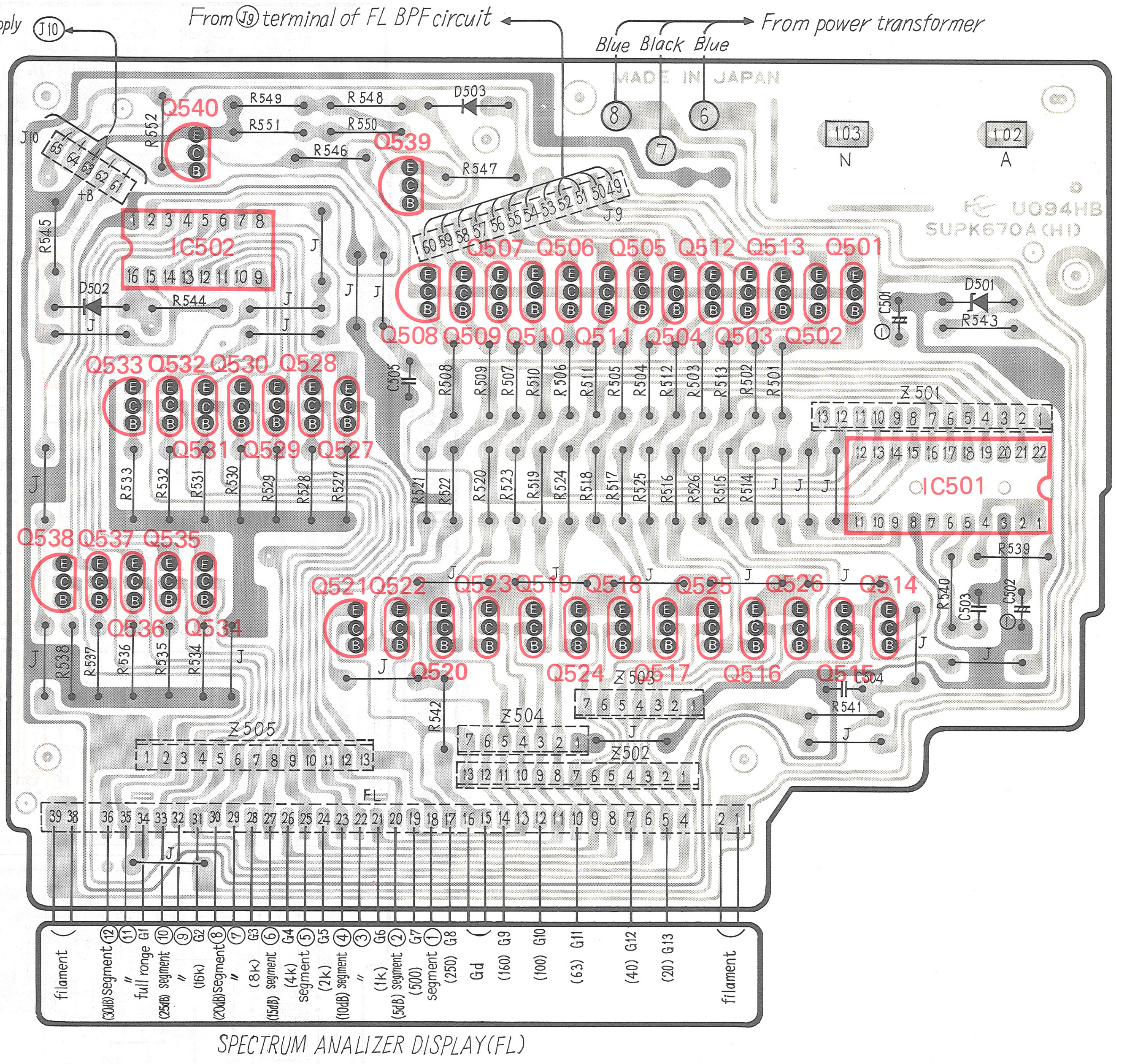
PIN No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PIN CONNECTION	F	F	Np	Nc	G 13	Nc	G 12	Nc	Nc	G 11	Nc	G 10	Nc	G 9	Gd	Gd	G 8	S 1	G. 7	S 2

PIN No.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
PIN CONNECTION	G 6	S 3	S 4	G 5	S 5	G 4	S 6	G 3	S 7	S 8	G 2	S 9	S 10	G 1	S 11	S 12	Np	F	F

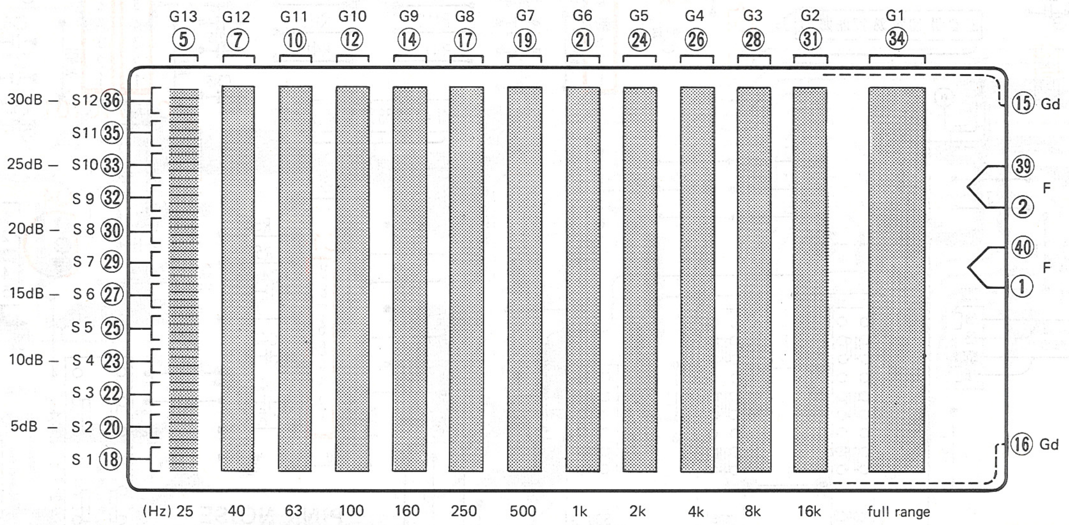
▨ Ground (Earth) lines


BAND LEVEL CONTROLS (Lch.)
D73
D71
D69
D67
D65
D63
D61
D59
D57
D55
D53
D51
R99
16kHz
8kHz
4kHz
2kHz
1kHz
500Hz
250Hz
160Hz
100Hz
63Hz
40Hz
25Hz
VR23
VR21
VR19
VR17
VR15
VR13
VR11
VR9
VR7
VR5
VR3
VR1
SUPK680 (HI)
J7
41 40 39 38 37 36 35 34
J8
48 47 46 45 44 43 42
To Left channel 160Hz~16kHz BPF
To Left channel 25Hz~100Hz BPF

• Spectrum analyzer display P.C.B.

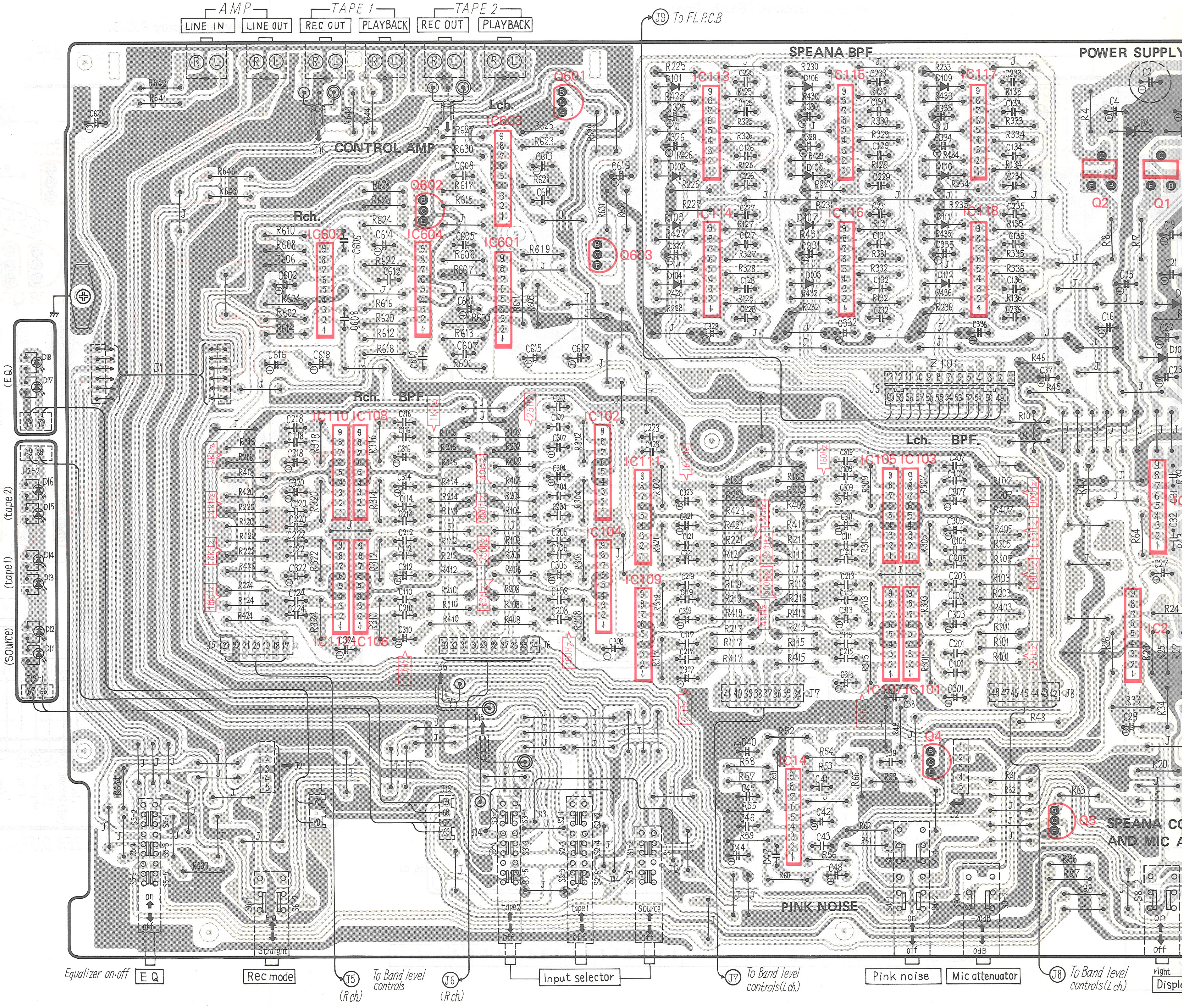

From power supply muting circuit
J10
From J9 terminal of FL BPF circuit
From power transformer
Blue Black Blue
MADE IN JAPAN
8
7
6
103
N
102
A
U094HB
SUPK670A(HI)
Q540
Q539
R549
R548
R551
R550
D503
R546
R547
R552
J10
65 64 63 62 61
+B
J9
60 59 58 57 56 55 54 53 52 51 50 49
R545
IC502
1 2 3 4 5 6 7 8
16 15 14 13 12 11 10 9
D502
R544
Q507 Q506 Q505 Q512 Q513 Q501
Q508 Q509 Q510 Q511 Q504 Q503 Q502
D501
R543
C501
C505
Q533 Q532 Q530 Q528
Q531 Q529 Q527
R508 R509 R507 R510 R506 R511 R505 R504 R512 R503 R513 R502 R501
Z501
13 12 11 10 9 8 7 6 5 4 3 2 1
IC501
12 13 14 15 16 17 18 19 20 21 22
11 10 9 8 7 6 5 4 3 2 1
R533 R532 R531 R530 R529 R528 R527
R521 R522 R520 R523 R519 R524 R518 R517 R525 R516 R526 R515 R514
Q538 Q537 Q535
Q536 Q534
R539
Q521 Q522 Q523 Q519 Q518 Q525 Q526 Q514
Q520 Q524 Z503 Q517 Q516 Q515
R540
C503
C502
C504
R541
R538 R537 R536 R535 R534
R542
Z504
7 6 5 4 3 2 1
Z505
1 2 3 4 5 6 7 8 9 10 11 12 13
Z502
13 12 11 10 9 8 7 6 5 4 3 2 1
FL
39 38 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 2 1
filament
(30dB) segment ⑫
full range G1 ⑪
(25dB) segment ⑩
(16k) G2
(20dB) segment ⑧
(8k) G3
(15dB) segment ⑥
(4k) G4
segment ⑤
(2k) G5
(10dB) segment ④
(1k) G6
(5dB) segment ②
(500) G7
segment ①
(250) G8
Gd
(160) G9
(100) G10
(63) G11
(40) G12
(20) G13
filament
SPECTRUM ANALIZER DISPLAY (FL)

• Terminal number of FL (Spectrum analyzer)


G13 ⑤
G12 ⑦
G11 ⑩
G10 ⑫
G9 ⑭
G8 ⑰
G7 ⑲
G6 ㉑
G5 ㉔
G4 ㉖
G3 ㉘
G2 ㉛
G1 ㉞
30dB – S12 ㊱
S11 ㉟
25dB – S10 ㉝
S9 ㉜
20dB – S8 ㉚
S7 ㉙
15dB – S6 ㉗
S5 ㉕
10dB – S4 ㉓
S3 ㉒
5dB – S2 ⑳
S1 ⑱
⑮ Gd
㊴ F
②
㊵ F
①
⑯ Gd
(Hz) 25
40
63
100
160
250
500
1k
2k
4k
8k
16k
full range

PIN No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
PIN CONNECTION	F	F	Np	Nc	G 13	Nc	G 12	Nc	Nc	G 11	Nc	G 10	Nc	G 9	Gd	Gd	G 8	S 1	G. 7	S 2	G 6	S 3	S 4	G 5	S 5	G 4	S 6	G 3	S 7	S 8	G 2	S 9	S 10	G 1	S 11	S 12	Np	F	F

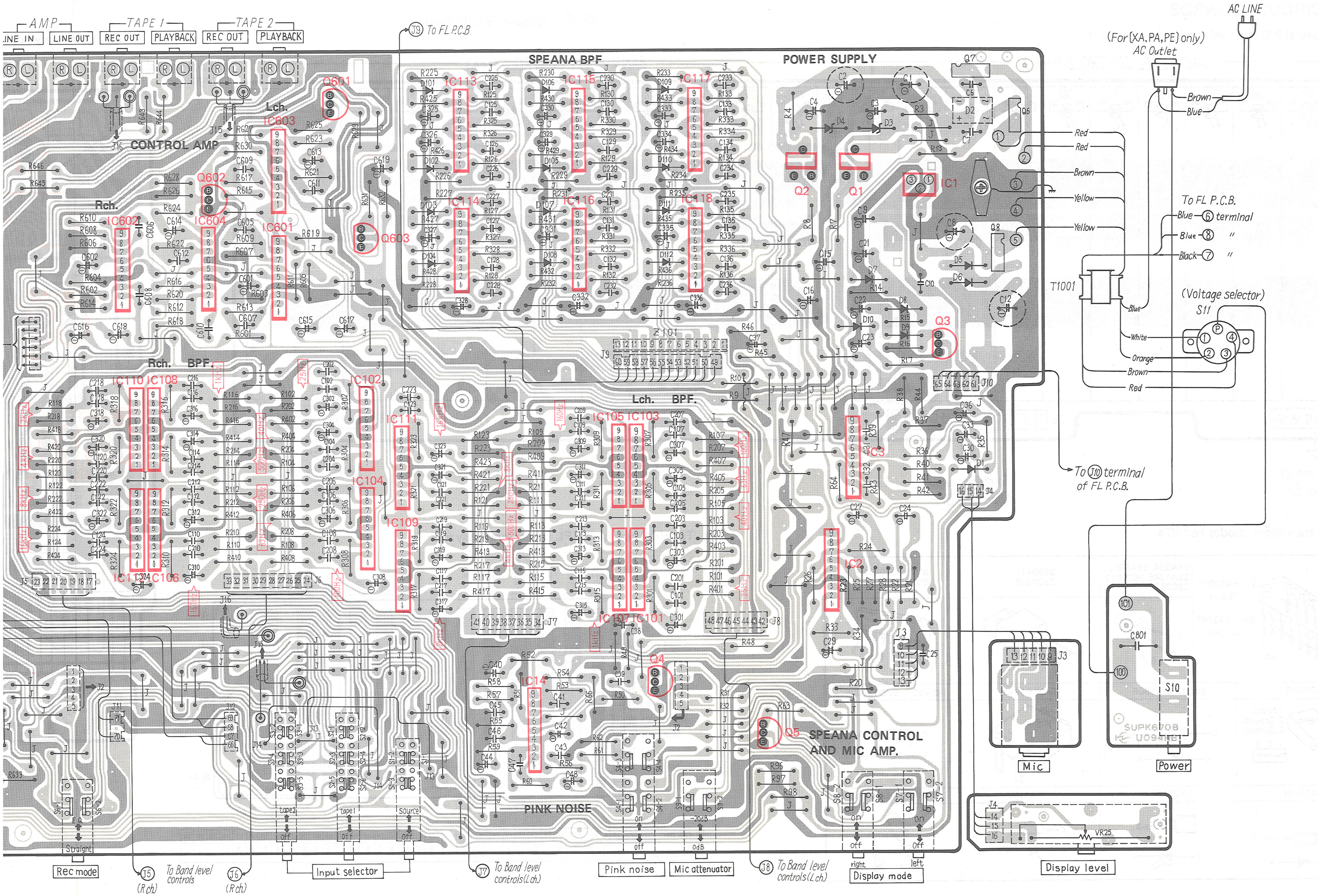
- **Band pass filter, Pink noise generator, Power source and Input/Output control P.C.B.**


AMP
LINE IN
LINE OUT
TAPE 1
REC OUT
PLAYBACK
TAPE 2
REC OUT
PLAYBACK
J9 To FL P.C.B
SPEANA BPF
POWER SUPPLY
CONTROL AMP
Lch.
Rch.
Rch. BPF.
Lch. BPF.
Q601
Q602
Q603
IC601
IC602
IC603
IC604
IC101
IC102
IC103
IC104
IC105
IC106
IC107
IC108
IC109
IC110
IC111
IC113
IC114
IC115
IC116
IC117
IC118
IC14
IC2
Q1
Q2
Q4
Q5
J1
J2
J15
J16
Z101
(EQ)
(tape 2)
(tape 1)
(source)
PINK NOISE
SPEANA CO
AND MIC A
on
off
tape2
tape1
Source
-20dB
0dB
right
Straight
Equalizer on-off
E Q
Rec mode
J5 (R ch)
To Band level controls
J6 (R ch.)
Input selector
J7 To Band level controls (L ch.)
Pink noise
Mic attenuator
J8 To Band level controls (L ch.)
Displ

12

13

14


AMP
LINE IN
LINE OUT
TAPE 1
REC OUT
PLAYBACK
TAPE 2
REC OUT
PLAYBACK
J9 To FL P.C.B
SPEANA BPF
POWER SUPPLY
CONTROL AMP
Lch.
Rch.
Rch. BPF
Lch. BPF
IC601
IC602
IC603
IC604
Q601
Q602
Q603
IC101
IC102
IC103
IC104
IC105
IC106
IC107
IC108
IC109
IC110
IC111
IC113
IC114
IC115
IC116
IC117
IC118
IC1
IC2
IC3
IC14
Q1
Q2
Q3
Q4
Q5
Q6
Q7
Q8
T1001
AC LINE
(For XA, PA, PE) only)
AC Outlet
Brown
Blue
Red
Red
Brown
Yellow
Yellow
To FL P.C.B.
Blue ⑥ terminal
Blue ⑧ "
Black ⑦ "
(Voltage selector)
S11
White
Orange
Brown
Red
To J10 terminal of FL P.C.B.
SPEANA CONTROL AND MIC AMP.
PINK NOISE
Mic
Power
S10
SUPK670B
Display level
VR25
Rec mode
Straight
FR
J5 To Band level controls (R ch)
J6 (R ch)
Input selector
tape2
tape1
Source
off
J7 To Band level controls (L ch)
Pink noise
on
off
Mic attenuator
-20dB
0dB
J8 To Band level controls (L ch)
Display mode
right
left
on
off
16kHz
8kHz
4kHz
2kHz
1kHz
500Hz
250Hz
125Hz
63Hz
31.5Hz

REPLACEMENT PARTS LIST

Notes:
1. Part numbers are indicated on most mechanical parts. Please use this part number for parts order.
2. Important safety notice: Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Ⓚ —marked parts are used for black only, while ○ —marked parts are for silver type only.
4. Part other than Ⓚ —and ○ —marked are used for both black and silver type.
5. Bracketed indications in Ref. No. columns specify the area. Parts without these indications can be used for all areas.
6. The " **S** " mark is service stardard parts and may differ from production parts.
7. The parenthesized numbers in the column of description stand for the quantity per set.

Black type model No. : SH-8055(K)

Numbering System of Resistor

Example

ERD	25	F	J	101
Type (carbon)	Wattage (¼W)	Shape	Tolerance (±5%)	Value (100Ω)

- The unit of resistance is Ω (ohm), K = 1000Ω, M = 1000kΩ.
- The unit of capacitance is μF (microfarad). P = 10^{-6} μF

Numberring System of Capacitor

Example

ECKD	1H	103	Z	F
Type	Voltage	Value	Tolerance	Peculiarity

Capacitor Type	Voltage		Tolerance
	ECEA type	Others	
ECEA : Electrolytic	0J : 6.3V	05 : 50V DC	J : ± 5%
ECCD : Ceramic	1A : 10V	1H : 50V DC	K : ± 10%
ECKD : Ceramic	1C : 16V	2H : 500V DC	Z : +80%,
ECQM : Ployester	1E : 25V	KC : 400V AC	–20%
ECF : Semi conductor	1V : 35V		P : +100%,
ECQV : TF	1H : 50V		–0%

● Resistors

Ref. No.	Part No.	Value
RESISTORS		
R3,4 ⚠ S	ERD25FJ681	680
R7,8 ⚠ S	ERD25FJ2R7	2.7
R9,10 ⚠ S	ERD25FJ2R7	2.7
R13 S	ERD25FJ332	3.3K
R14 S	ERD25FJ472	4.7K
R15 S	ERD25TJ273	27K
R16 S	ERD25TJ123	12K
R17 S	ERD25FJ562	5.6K
R20 S	ERD25FJ102	1K
R21 S	ERD25FJ472	4.7K
R22 S	ERD25FJ102	1K
R23 S	ERD25TJ153	15K
R24 S	ERD25TJ224	220K
R25 S	ERD25FJ472	4.7K
R26 S	ERD25FJ561	560
R27 S	ERD25TJ104	100K
R28 S	ERD25FJ222	2.2K
R31,32 S	ERD25TJ124	120K
R33 S	ERD25TJ274	270K
R34 S	ERD25TJ104	100K
R35 S	ERD25FJ561	560
R36 S	ERD25FJ102	1K
R37 S	ERD25TJ104	100K
R38 S	ERD25FJ681	680
R39 S	ERD25TJ104	100K
R40,41 S	ERD25FJ102	1K
R42 S	ERD25FJ471	470
R43 S	ERD25TJ124	120K
R44 S	ERD25TJ683	68K
R45 S	ERD25TJ124	120K
R46 S	ERD25FJ822	8.2K
R47 S	ERD25TJ334	330K
R48 S	ERD50FJ181	180
R49 S	ERD25TJ564	560K
R50 S	ERD25TJ334	330K
R51 S	ERD25TJ104	100K
R52 S	ERD25FJ102	1K
R53 S	ERD25TJ104	100K
R54 S	ERD25FJ682	6.8K
R55 S	ERD25TJ104	100K

Ref. No.	Part No.	Value
RESISTORS		
R56 S	ERD25FJ331	330
R57 S	ERD25FJ332	3.3K
R58,59 S	ERD25FJ102	1K
R60 S	ERD25TJ473	47K
R61 S	ERD25FJ102	1K
R62 S	ERD25TJ104	100K
R63 S	ERD25FJ102	1K
R64 S	ERD25FJ182	1.8K
R66 S	ERD25TJ104	100K
R96,97 ⚠	ERDS1FJ222	2.2K
R98 ⚠	ERDS1FJ182	1.8K
R99 S	ERD25FJ101	100
R101,102 S	ERD25TJ274	270K
R103,104 S	ERD25TJ274	270K
R105,106 S	ERD25TJ274	270K
R107,108 S	ERD25TJ274	270K
R109,110 S	ERD25TJ124	120K
R111,112 S	ERD25TJ124	120K
R113,114 S	ERD25TJ123	12K
R115,116 S	ERD25TJ123	12K
R117,118 S	ERD25FJ103	10K
R119,120 S	ERD25TJ123	12K
R121,122 S	ERD25TJ123	12K
R123,124 S	ERD25FJ103	10K
R125,126 S	ERD25TJ333	33K
R127 S	ERD25TJ333	33K
R128 S	ERD25TJ393	39K
R129 S	ERD25TJ333	33K
R130	ERD25TJ393	39K
R131 S	ERD25TJ333	33K
R132,133 S	ERD25TJ333	33K
R134,135 S	ERD25TJ393	39K
R136 S	ERD25TJ273	27K
R201,202 S	ERD25TJ153	15K
R203,204 S	ERD25TJ153	15K
R205,206 S	ERD25TJ153	15K
R207,208 S	ERD25TJ153	15K
R209,210 S	ERD25FJ682	6.8K
R211,212 S	ERD25FJ682	6.8K
R213,214 S	ERD25FJ222	2.2K

Ref. No.	Part No.	Value
RESISTORS		
R215,216 S	ERD25FJ222	2.2K
R217,218 S	ERD25FJ222	2.2K
R219,220 S	ERD25FJ222	2.2K
R221,222 S	ERD25FJ222	2.2K
R223,224 S	ERD25FJ222	2.2K
R225,226 S	ERD25FJ222	2.2K
R227 S	ERD25FJ222	2.2K
R228 S	ERD25FJ182	1.8K
R229,230 S	ERD25FJ222	2.2K
R231,232 S	ERD25FJ222	2.2K
R233,234 S	ERD25FJ222	2.2K
R235,236 S	ERD25FJ222	2.2K
R301,302 S	ERD25TJ564	560K
R303,304 S	ERD25TJ564	560K
R305,306 S	ERD25TJ564	560K
R307,308 S	ERD25TJ564	560K
R309,310 S	ERD25TJ224	220K
R311,312 S	ERD25TJ224	220K
R313,314 S	ERD25TJ223	22K
R315,316 S	ERD25TJ223	22K
R317,318 S	ERD25TJ223	22K
R319,320 S	ERD25TJ223	22K
R321,322 S	ERD25TJ223	22K
R323,324 S	ERD25TJ223	22K
R325,326 S	ERD25TJ274	270K
R327 S	ERD25TJ224	220K
R328 S	ERD25TJ274	270K
R329 S	ERD25TJ224	220K
R330 S	ERD25TJ274	270K
R331 S	ERD25TJ224	220K
R332 S	ERD25TJ274	270K
R333,334 S	ERD25TJ224	220K
R335,336 S	ERD25TJ224	220K
R401,402 S	ERD25FJ152	1.5K
R403,404 S	ERD25FJ152	1.5K
R405,406 S	ERD25FJ152	1.5K
R407,408 S	ERD25FJ152	1.5K
R409,410 S	ERD25FJ152	1.5K
R411,412 S	ERD25FJ152	1.5K
R413,414 S	ERD25FJ152	1.5K

Ref. No.	Part No.	Value
RESISTORS		
R415,416 S	ERD25FJ152	1.5K
R417,418 S	ERD25FJ152	1.5K
R419,420 S	ERD25FJ152	1.5K
R421,422 S	ERD25FJ152	1.5K
R423,424 S	ERD25FJ152	1.5K
R425,426 S	ERD25FJ182	1.8K
R427 S	ERD25FJ182	1.8K
R428,429 S	ERD25FJ272	2.7K
R430,431 S	ERD25FJ272	2.7K
R432 S	ERD25FJ272	2.7K
R433 S	ERD25FJ152	1.5K
R434 S	ERD25FJ821	820
R435 S	ERD25FJ681	680
R436 S	ERD25FJ821	820
R501,502 S	ERD25FJ472	4.7K
R503,504 S	ERD25FJ472	4.7K
R505,506 S	ERD25FJ472	4.7K
R507,508 S	ERD25FJ472	4.7K
R509,510 S	ERD25FJ472	4.7K
R511,512 S	ERD25FJ472	4.7K
R513,514 S	ERD25FJ472	4.7K
R515,516 S	ERD25FJ472	4.7K
R517,518 S	ERD25FJ472	4.7K
R519,520 S	ERD25FJ472	4.7K
R521,522 S	ERD25FJ472	4.7K
R523,524 S	ERD25FJ472	4.7K
R525,526 S	ERD25FJ472	4.7K
R527,528 S	ERD25FJ103	10K
R529,530 S	ERD25FJ103	10K
R531,532 S	ERD25FJ103	10K
R533,534 S	ERD25FJ103	10K
R535,536 S	ERD25FJ103	10K
R537,538 S	ERD25FJ103	10K
R539 S	ERD25FJ471	470
R540 S	ERD25TJ333	33K
R541 S	ERD25TJ104	100K
R542 S	ERD25FJ103	10K
R543 ⚠ S	ERD25FJ471	470
R544 S	ERD25FJ472	4.7K
R545 S	ERD25FJ150	15

● Resistors

Ref. No.	Part No.	Value
RESISTORS		
R546 S	ERD25TJ123	12K
R547 S	ERD25TJ273	27K
R548 S	ERD25TJ823	82K
R549 S	ERD25TJ223	22K
R550 S	ERD25TJ473	47K
R551 S	ERD25FJ103	10K
R552 S	ERD25FJ472	4.7K

Ref. No.	Part No.	Value
RESISTORS		
R601,602 S	ERD25FJ102	1K
R603,604 S	ERD25TJ683	68K
R605,606 S	ERD25TJ104	100K
R607,608 S	ERD25TJ104	100K
R609,610 S	ERD25FJ682	6.8K
R611,612 S	ERD25FJ103	10K
R613,614 S	ERD25FJ103	10K

Ref. No.	Part No.	Value
RESISTORS		
R615,616 S	ERD25FJ472	4.7K
R617,618 S	ERD25FJ472	4.7K
R619,620 S	ERD25FJ472	4.7K
R621,622 S	ERD25FJ472	4.7K
R623,624 S	ERD25FJ222	2.2K
R625,626 S	ERD25TJ104	100K
R627,628 S	ERD25FJ181	180

Ref. No.	Part No.	Value
RESISTORS		
R629,630 S	ERD25FJ102	1K
R631 S	ERD25FJ103	10K
R632 S	ERD25TJ224	220K
R633,634 S	ERD25TJ104	100K
R641～646 S	ERD25FJ152	1.5K

● Capacitors

Ref. No.	Part No.	Value
CAPACITORS		
C1,2	ECEA1EU471	470
C3,4	ECEA1EU101	100
C5,6 S	ECKD1H223ZF	0.022
C8	ECEA1VU221	220
C9	ECEA1CU470	47
C10 S	ECKD1H223ZF	0.022
C12	ECEA1VU221	220
C15,16	ECEA1EU470	47
C21	ECEA1HU010	1
C22	ECEA0JU101	100
C23	ECEA1EU101	100
C24	ECEA1EU3R3	3.3
C25	ECFTD332KXL	0.0033
C27	ECEA1EU3R3	3.3
C29,30	ECEA1EU4R7	4.7
C31 S	ECCD1H220K	22P
C32 S	ECCD1H330K	33P
C33	ECEA1EU4R7	4.7
C36	ECEA1CU100	10
C37	ECEA0JU101	100
C38	ECEA1CU470	47
C39	ECFTD683KXL	0.068
C40	ECEA1AU470	47
C41 S	ECCD1H100KC	10P
C42	ECEA1CU470	47
C43	ECFTD823KXL	0.082
C44	ECEA1HU010	1
C45	ECQV05184JZ	0.18
C46	ECFTD333KXL	0.033

Ref. No.	Part No.	Value
CAPACITORS		
C47 S	ECCD1H100KC	10P
C48	ECEA1EU4R7	4.7
C101,102	ECFTD683KXL	0.068
C103,104	ECFTD473KXL	0.047
C105,106	ECFTD333KXL	0.033
C107,108	ECFTD183KXL	0.018
C109,110	ECFTD273KXL	0.027
C111,112	ECFTD183KXL	0.018
C113,114	ECFTD563KXL	0.056
C115,116	ECFTD273KXL	0.027
C117,118	ECFTD123KXL	0.012
C119,120	ECFTD682KXL	0.0068
C121,122	ECFTD332KXL	0.0033
C123,124	ECFTD152KXL	0.0015
C125	ECQM1H274JZ	0.27
C126	ECQM1H184JZ	0.18
C127	ECQV05124JZ	0.12
C128	ECFTD823KXL	0.082
C129	ECFTD473KXL	0.047
C130	ECFTD273KXL	0.027
C131	ECFTD153KXL	0.015
C132	ECFTD682KXL	0.0068
C133	ECFTD392KXL	0.0039
C134	ECFTD222KXL	0.0022
C135	ECFTD102KXL	0.001
C136 S	ECKD1H471KB	470P
C201,202	ECFTD683KXL	0.068
C203,204	ECFTD473KXL	0.047
C205,206	ECFTD273KXL	0.027

Ref. No.	Part No.	Value
CAPACITORS		
C207,208	ECFTD183KXL	0.018
C209,210	ECFTD273KXL	0.027
C211,212	ECFTD153KXL	0.015
C213,214	ECFTD473KXL	0.047
C215,216	ECFTD223KXL	0.022
C217,218	ECFTD153KXL	0.015
C219,220	ECFTD562KXL	0.0056
C221,222	ECFTD272KXL	0.0027
C223,224	ECFTD182KXL	0.0018
C225	ECQM1H274JZ	0.27
C226	ECQM1H184JZ	0.18
C227	ECQV05124JZ	0.12
C228	ECFTD683KXL	0.068
C229	ECFTD473KXL	0.047
C230	ECFTD273KXL	0.027
C231	ECFTD153KXL	0.015
C232	ECFTD682KXL	0.0068
C233	ECFTD392KXL	0.0039
C234	ECFTD182KXL	0.0018
C235 S	ECKD1H821KB	820P
C236 S	ECKD1H471KB	470P
C301,302	ECEA1EU470	47
C303,304	ECEA1EU470	47
C305,306	ECEA1EU470	47
C307,308	ECEA1EU470	47
C309,310	ECEA1EU470	47
C311,312	ECEA1EU100	10
C313,314	ECEA1EU100	10
C315,316	ECEA1EU100	10

Ref. No.	Part No.	Value
CAPACITORS		
C317,318	ECEA1HU010	1
C319,320	ECEA1HU010	1
C321,322	ECEA1HU010	1
C323,324	ECEA1HU010	1
C325	ECEA1AU470	47
C326,327	ECEA1AU330	33
C328,329	ECEA1CU220	22
C330	ECEA1CU220	22
C331,332	ECEA1CU100	10
C333,334	ECEA1CU100	10
C335,336	ECEA1CU100	10
C501	ECEA1EU470	47
C502	ECEA1AU101	100
C503 S	ECKD1H561KB	560P
C504 S	ECKD1H221KB	220P
C505 S	ECKD1H223ZF	0.022
C601,602	ECEA1EU4R7	4.7
C605,606 S	ECCD1H220K	22P
C607,608 S	ECCD1H220K	22P
C609,610 S	ECCD1H470K	47P
C611,612 S	ECCD1H330K	33P
C613,614	ECEA1EU100	10
C615,616	ECEA1EU221	220
C617,618	ECEA1EU221	220
C619	ECEA1CU100	10
C620	ECEA0JU101	100
C801 ⚠	ECKDKC103PF2	0.01

● Electronic parts

Ref. No.	Part No.	Description
INTEGRATED CIRCUITS		
IC1	AN78N12	12V Regulator
IC2～4,101～118	SVITA75559S	Ope Amp, BPF
IC501	SVIM54834	14CH, Selector
IC502	SVIHA12010	FL Driver
IC601,602	SVITA75559S	Buffer
IC603,604	SVINJM2043SE	Inverter
TRANSISTORS		
Q1	2SD1265－P	Regulator
Q2	2SB941－P	Regulator
Q3	2SC1815L－G	Muting
Q4	2SA921－T	White Noise
Q5,601,602	2SC2878A－T	Muting
Q501～513	2SA1246T－A	Sampling Gate
Q514～526	2SA1015－Y	Inverter
Q527～539,603 S	2SA722－S	Inverter, Buffer
Q540	2SC2878A－T	Muting
IC PROTECTORS		
Q6～8	SVIICPF10	1A, 0.2Ω

Ref. No.	Part No.	Description
DIODES		
D1,7,8,10, 101～112	SVD1S2076A	Switching
D2 ⚠	SVD1B4B42	Rectifire
D3,4	SVDRD16EB	16V Zener
D5,6 ⚠	SVD1SR35200F	Rectifire
D9	MA27W－A	Bias
D11～16	LN41YCPH	LED, Input Selector
D17,18	LN81RCPH	LED, EQ
D51～74	LN251RCPP	LED, Level Controll
D501	MA1200	20V Zener
D502	SVD1S2076A	Bias
D503 S	2OA90	Bias
COMPONENT COMBINATIONS		
Z101,502	RGSD12X104K	100kΩ×12
Z501	RGSD12X472K	4.7kΩ×12
Z503,504	PJB6XC221K	220pF×6
Z505	RGHD12X562K	5.6kΩ×12

Ref. No.	Part No.	Description
POWER TRANSFORMER		
T1001 ⚠	SLTK5V3－W	Power Source
VARIABLE RESISTORS		
VR1～24	EVAJN2J15G25	Band Level Controll
VR25	EWANH0C15B24	Display Level
FLUORESCENT DISPLAY TUBE		
FL	SADBG188Z	Spectrum analyzer
SWITCHES		
S1～3	SSHK37	Input Selector
S4,9	SSHK38	Pink Noise, Mic ATT
S5	SSHK35	Equalizer, on-off
S6	SSHK36	Rec Mode
S7,8	SSHK39	Display Mode
S10 ⚠	SSH1057	Power Source
S11 ⚠	ESE3787	Voltage Selector

● Cabin

Ref. No.
CABINET
1
1
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2
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5
6
6
7
8
8
9
10
10
11
12
13
14
15
16
16－1
17
18〔E〕
18〔XA, PA, P
18〔other〕
19〔EK〕
19〔PA, PE〕
19〔XL〕
19〔other〕
20〔XA, PA, P only
21
22
23
24
25
26
26
27
28
29
30〔EK〕
30〔other〕
31

Ref. No.	Part No.	Value
RESISTORS		
R615,616 S	ERD25FJ472	4.7K
R617,618 S	ERD25FJ472	4.7K
R619,620 S	ERD25FJ472	4.7K
R621,622 S	ERD25FJ472	4.7K
R623,624 S	ERD25FJ222	2.2K
R625,626 S	ERD25TJ104	100K
R627,628 S	ERD25FJ181	180

Ref. No.	Part No.	Value
RESISTORS		
R629,630 S	ERD25FJ102	1K
R631 S	ERD25FJ103	10K
R632 S	ERD25TJ224	220K
R633,634 S	ERD25TJ104	100K
R641～646 S	ERD25FJ152	1.5K

Ref. No.	Part No.	Value
CAPACITORS		
C207,208	ECFTD183KXL	0.018
C209,210	ECFTD273KXL	0.027
C211,212	ECFTD153KXL	0.015
C213,214	ECFTD473KXL	0.047
C215,216	ECFTD223KXL	0.022
C217,218	ECFTD153KXL	0.015
C219,220	ECFTD562KXL	0.0056
C221,222	ECFTD272KXL	0.0027
C223,224	ECFTD182KXL	0.0018
C225	ECQM1H274JZ	0.27
C226	ECQM1H184JZ	0.18
C227	ECQV05124JZ	0.12
C228	ECFTD683KXL	0.068
C229	ECFTD473KXL	0.047
C230	ECFTD273KXL	0.027
C231	ECFTD153KXL	0.015
C232	ECFTD682KXL	0.0068
C233	ECFTD392KXL	0.0039
C234	ECFTD182KXL	0.0018
C235 S	ECKD1H821KB	820P
C236 S	ECKD1H471KB	470P
C301,302	ECEA1EU470	47
C303,304	ECEA1EU470	47
C305,306	ECEA1EU470	47
C307,308	ECEA1EU470	47
C309,310	ECEA1EU470	47
C311,312	ECEA1EU100	10
C313,314	ECEA1EU100	10
C315,316	ECEA1EU100	10

Ref. No.	Part No.	Value
CAPACITORS		
C317,318	ECEA1HU010	1
C319,320	ECEA1HU010	1
C321,322	ECEA1HU010	1
C323,324	ECEA1HU010	1
C325	ECEA1AU470	47
C326,327	ECEA1AU330	33
C328,329	ECEA1CU220	22
C330	ECEA1CU220	22
C331,332	ECEA1CU100	10
C333,334	ECEA1CU100	10
C335,336	ECEA1CU100	10
C501	ECEA1EU470	47
C502	ECEA1AU101	100
C503 S	ECKD1H561KB	560P
C504 S	ECKD1H221KB	220P
C505 S	ECKD1H223ZF	0.022
C601,602	ECEA1EU4R7	4.7
C605,606 S	ECCD1H220K	22P
C607,608 S	ECCD1H220K	22P
C609,610 S	ECCD1H470K	47P
C611,612 S	ECCD1H330K	33P
C613,614	ECEA1EU100	10
C615,616	ECEA1EU221	220
C617,618	ECEA1EU221	220
C619	ECEA1CU100	10
C620	ECEA0JU101	100
C801 ⚠	ECKDKC103PF2	0.01

rt No.	Description
2076A	Switching
4B42	Rectifire
16EB	16V Zener
R35200F	Rectifire
—A	Bias
PH	LED, Input Selector
PH	LED, EQ
CPP	LED, Level Controll
	20V Zener
2076A	Bias
	Bias
INATIONS	
2X104K	100kΩ×12
2X472K	4.7kΩ×12
C221K	220pF×6
2X562K	5.6kΩ×12

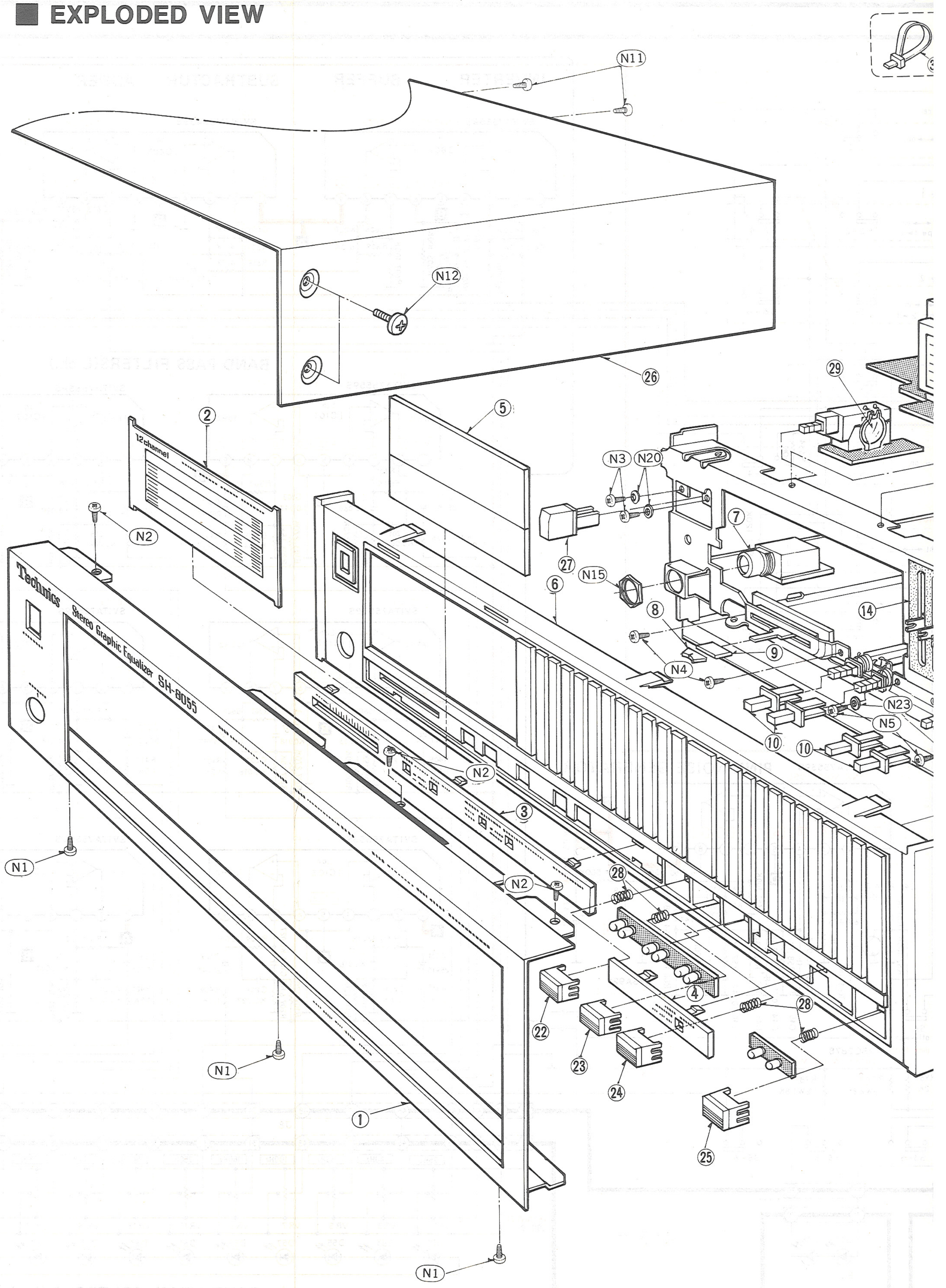
Ref. No.	Part No.	Description
POWER TRANSFORMER		
T1001 ⚠	SLTK5V3—W	Power Source
VARIABLE RESISTORS		
VR1～24	EVAJN2J15G25	Band Level Controll
VR25	EWANH0C15B24	Display Level
FLUORESCENT DISPLAY TUBE		
FL	SADBG188Z	Spectrum analyzer
SWITCHES		
S1～3	SSHK37	Input Selector
S4,9	SSHK38	Pink Noise, Mic ATT
S5	SSHK35	Equalizer, on-off
S6	SSHK36	Rec Mode
S7,8	SSHK39	Display Mode
S10 ⚠	SSH1057	Power Source
S11 ⚠	ESE3787	Voltage Selector

• Cabinet and Chassis parts

Ref. No.	Part No.	Description
CABINET and CHASSIS PARTS		
1 ○	SGWK210PA	Front Panel (Silver) (1)
1 Ⓚ	SGWK210BA	Front Panel (Black) (1)
2 ○	SDUK8	Dial Plate(Silver) (1)
2 Ⓚ	SDUK8—1	Dial Plate(Black) (1)
3 ○	SGXK75	Ornament Cover (Silver) (1)
3 Ⓚ	SGXK75—1	Ornament Cover (Black) (1)
4 ○	SGXK76	Ornament Cover (Silver) (1)
4 Ⓚ	SGXK76—1	Ornament Cover (Black) (1)
5 ○	SGUK10	Transparent Plate (Silver) (1)
5 Ⓚ	SGUK10—1	Transparent Plate (Black) (1)
6 ○	SGXK74	Sub Front Panel (Silver) (1)
6 Ⓚ	SGXK74—1	Sub Front Panel (Black) (1)
7	SJJK22	Jack, Headphone(1)
8 ○	SBD69—3K	Button, Display Level(Silver) (1)
8 Ⓚ	SBD69—1	Button, Display Level(Black) (1)
9	SUBK9	Connection Rod (1)
10 ○	SBC475—1	Button(Silver) (4)
10 Ⓚ	SBC475	Button(Black) (4)
11	SBDK9	Button (24)
12	SBZK29	Connection Rod (24)
13	SBC475—2	Button, Rec Mode (1)
14	SGXK77	Spacer (1)
15	SHRK918	Holder (1)
16	SKUH8055N	Bottom Board(W/ Feet) (1)
16—1	SHS2481	Foot (4)
17	SJF3059—2N	Terminal Board, In/Output (1)
18〔E〕	SGPK210—2A	Rear Panel (1)
18〔XA, PA, PE〕	SGPK210—3A	Rear Panel (1)
18〔other〕	SGPH8055—SH	Rear Panel Ass'y (1)
19〔EK〕 ⚠	QFC1205M	Cord, Power Source (1)
19〔PA, PE〕 ⚠	RJA52YA	Cord, Power Source (1)
19〔XL〕 ⚠	QFC1208M	Cord, Power Source (1)
19〔other〕 ⚠	SJA138—3	Cord, Power Source (1)
20〔XA, PA, PE〕 only ⚠	SJS9221—1	Socket, AC Outlet (1)
21	SUWK390	Holder (1)
22	SBCKH8055N	Button, Source (1)
23	SBCKH8055N1	Button, Tape 1 (1)
24	SBCKH8055N2	Button, Tape 2 (1)
25	SBCKH8055N3	Button, EQ (1)
26 ○	SKCK110S	Cabinet(Silver) (1)
26 Ⓚ	SKCK110B	Cabinet(Black) (1)
27	SBC337—1	Button, Power (1)
28	SUSK30—1	Spring (4)
29	SMXK26	Cover (1)
30〔EK〕	SHR129	Bushing (1)
30〔other〕	SHR127	Bushing (1)
31	SHR301	Clamper, Lead Wire (2)

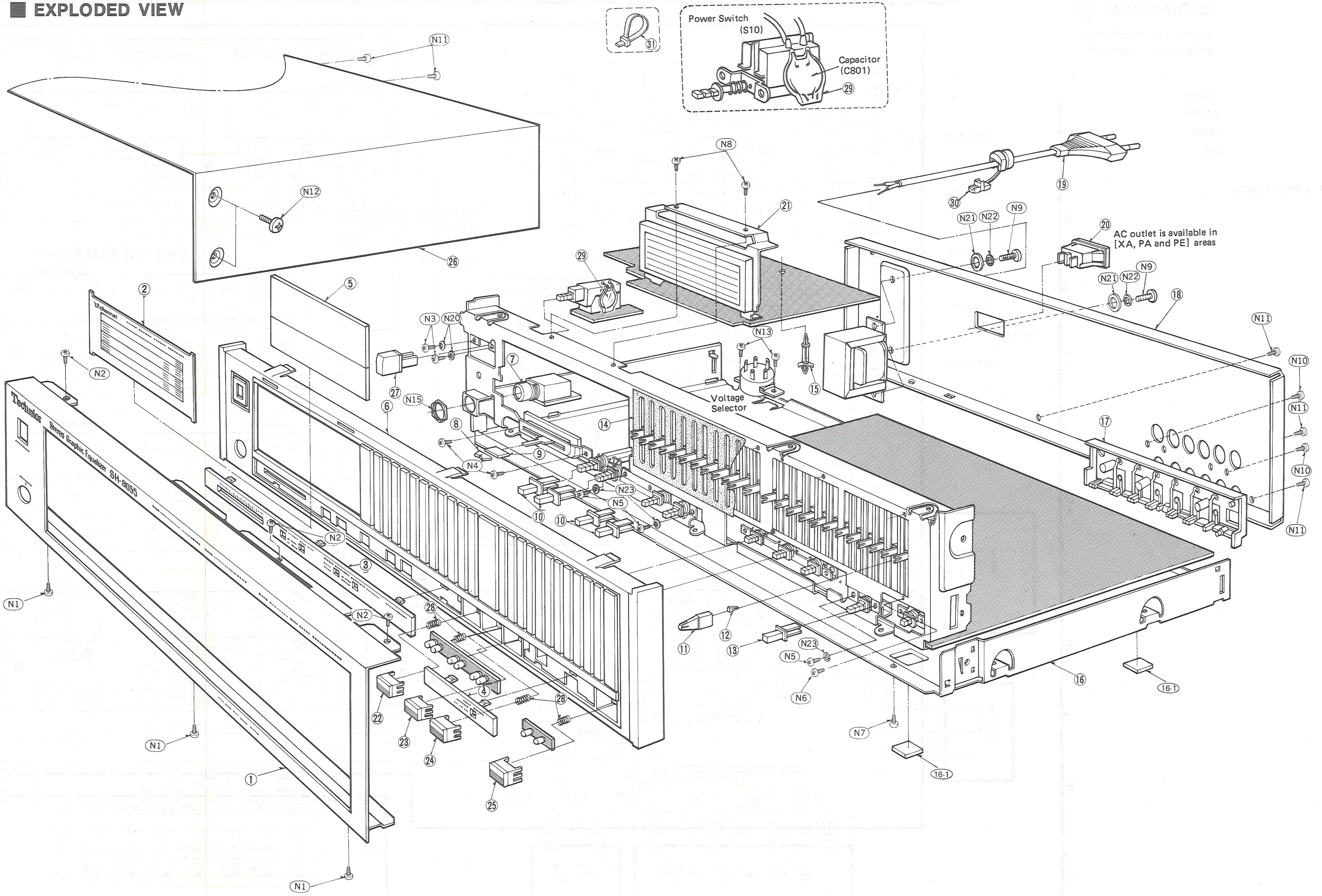
Ref. No.	Part No.	Description
SCREWS		
N1 S	XTB3+8B	Tapping, ⊕3×8 (3)
N2 S	XTB3+8B	Tapping, ⊕3×8 (3)
N3 S	XSN3+6S	⊕3×6 (2)
N4 S	XSN2+2AFZ	⊕2×2 (2)
N5 S	XSN3+6S	⊕3×6 (2)
N6 S	XSN2+4FZ	⊕2×4 (12)
N7 S	XTB3+8B	Tapping, ⊕3×8 (3)
N8 S	XTB3+8B	Tapping, ⊕3×8 (2)
N9 S	XSN4+8FZ	⊕4×8 (2)
N10 S	XTB3+10BFZ	Tapping, ⊕3×10(2)
N11 S	XTB3+8BFZ	Tapping, ⊕3×8 (5)
N12 ○	SNE2095—2	Cabinet (Silver) (4)
N12 Ⓚ	SNE2095—3	Cabinet (Black) (4)
N13 S	XTB3+8B	Tapping, ⊕3×8 (2)
NUTS		
N15 S	XNS12	Headphones, ϕ12 (1)
WASHERS		
N20 S	XWA3B	Spring, ϕ3 (2)
N21 S	XWG4	Power Transformer, ϕ4(2)
N22 S	XWA4B	Power Transformer, ϕ4(2)
N23 S	XWA3B	Spring, ϕ3 (1)
ACCESSORIES		
A1〔EK〕	SQFK10054	Instruction Book (1)
A1〔EGA〕	SQFK10047	Instruction Book (1)
A1〔XA〕	SQFK10045	Instruction Book (1)
A1〔PA, PE〕	SQFK10049	Instruction Book (1)
A1 [Ei]	SQFK10048	Instruction Book (1)
A1〔other〕	SQFK10046	Instruction Book (1)
A2〔XA〕only ⚠	SJP5213—1	Plug Adaptor (1)
A3〔PA, PE〕only ⚠	SJP9215	Plug Adaptor (1)
A4	SJP2129—5	Cord, Pin-pin (2)
PACKING PARTS		
P1〔EF〕	SPGK115	Carton Box (1)
P1〔other〕	SPGK116	Carton Box (1)
P2	SPSK59	Pad, Left (1)
P3	SPSK60	Pad, Right (1)
P4	SPP699	Polythylene Bag (1)

EXPLODED VIEW



	Description
	Tapping, ⊕3×8 (3) Tapping, ⊕3×8 (3) ⊕3×6 (2) ⊕2×2 (2) ⊕3×6 (2) ⊕2×4 (12) Tapping, ⊕3×8 (3) Tapping, ⊕3×8 (2) ⊕4×8 (2)
Z	Tapping, ⊕3×10 (2)
	Tapping, ⊕3×8 (5) Cabinet (Silver) (4) Cabinet (Black) (4) Tapping, ⊕3×8 (2)
	Headphones, ϕ12 (1)
	Spring, ϕ3 (2) Power Transformer, ϕ4 (2) Power Transformer, ϕ4 (2) Spring, ϕ3 (1)
	Instruction Book (1) Instruction Book (1) Instruction Book (1) Instruction Book (1) Instruction Book (1) Instruction Book (1) Plug Adaptor (1) Plug Adaptor (1) Cord, Pin-pin (2)
	Carton Box (1) Carton Box (1) Pad, Left (1) Pad, Right (1) Polythylene Bag (1)

EXPLODED VIEW



N11
N12
26
2
12 channel
5
N2
Technics
Stereo Graphic Equalizer SH-8055
1
N1
3
N2
4
22
23
24
25
28
27
6
N3
N20
N15
7
8
N4
9
10
N5
N23
14
29
21
N8
N13
Voltage Selector
15
31
Power Switch
(S10)
Capacitor
(C801)
29
30
19
N21
N22
N9
20
AC outlet is available in [XA, PA and PE] areas
18
N11
N10
17
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16-1
N7
N6
N5
N23
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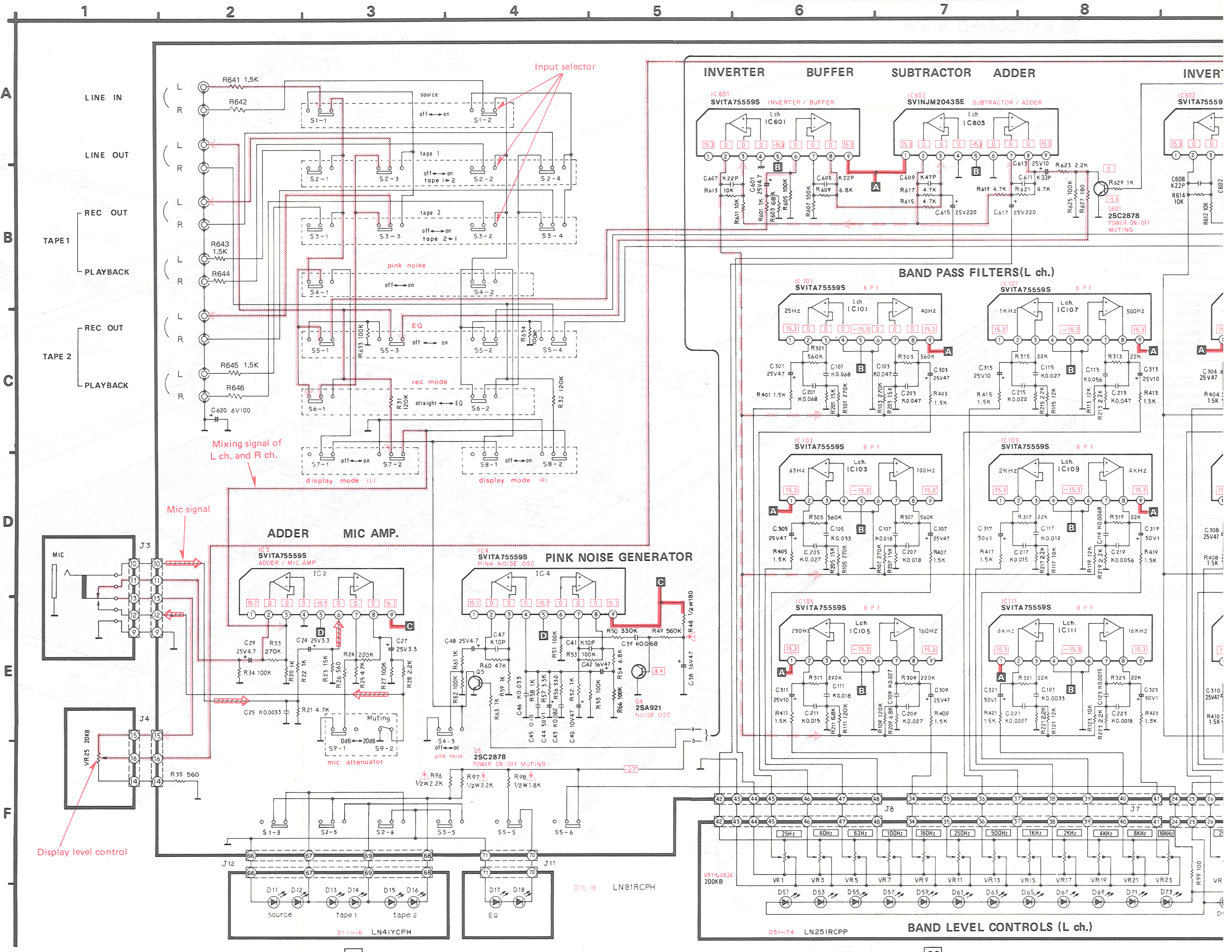
SCHEMATIC DIAGRAM Ⓐ

(This schematic diagram may be modified at any time with the development of new technology.)

- Input/Output control
- Microphone amplifier
- Pink noise generator
- Band level control
- Band pass filter
- Power source


1
2
3
4
5
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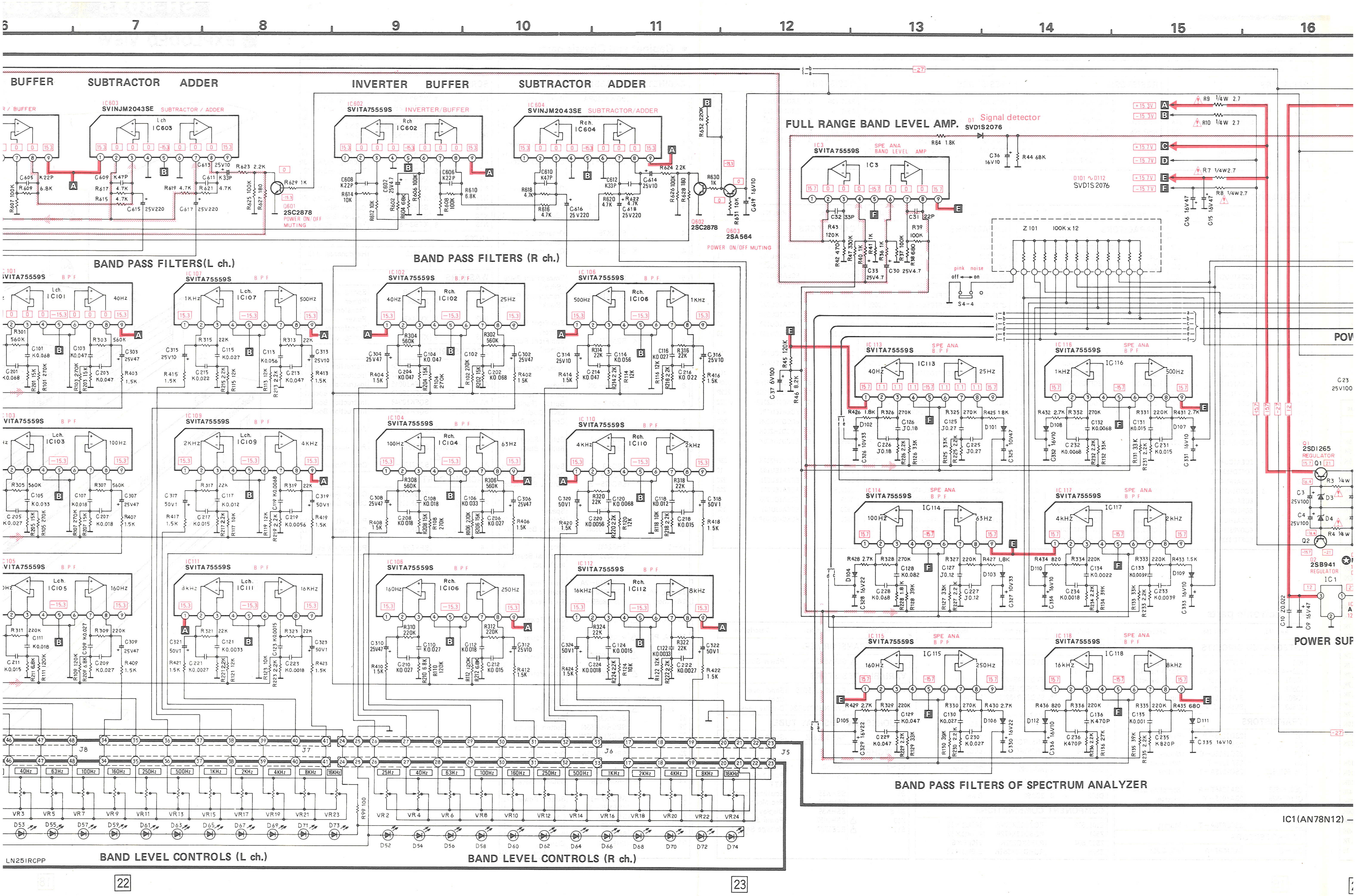
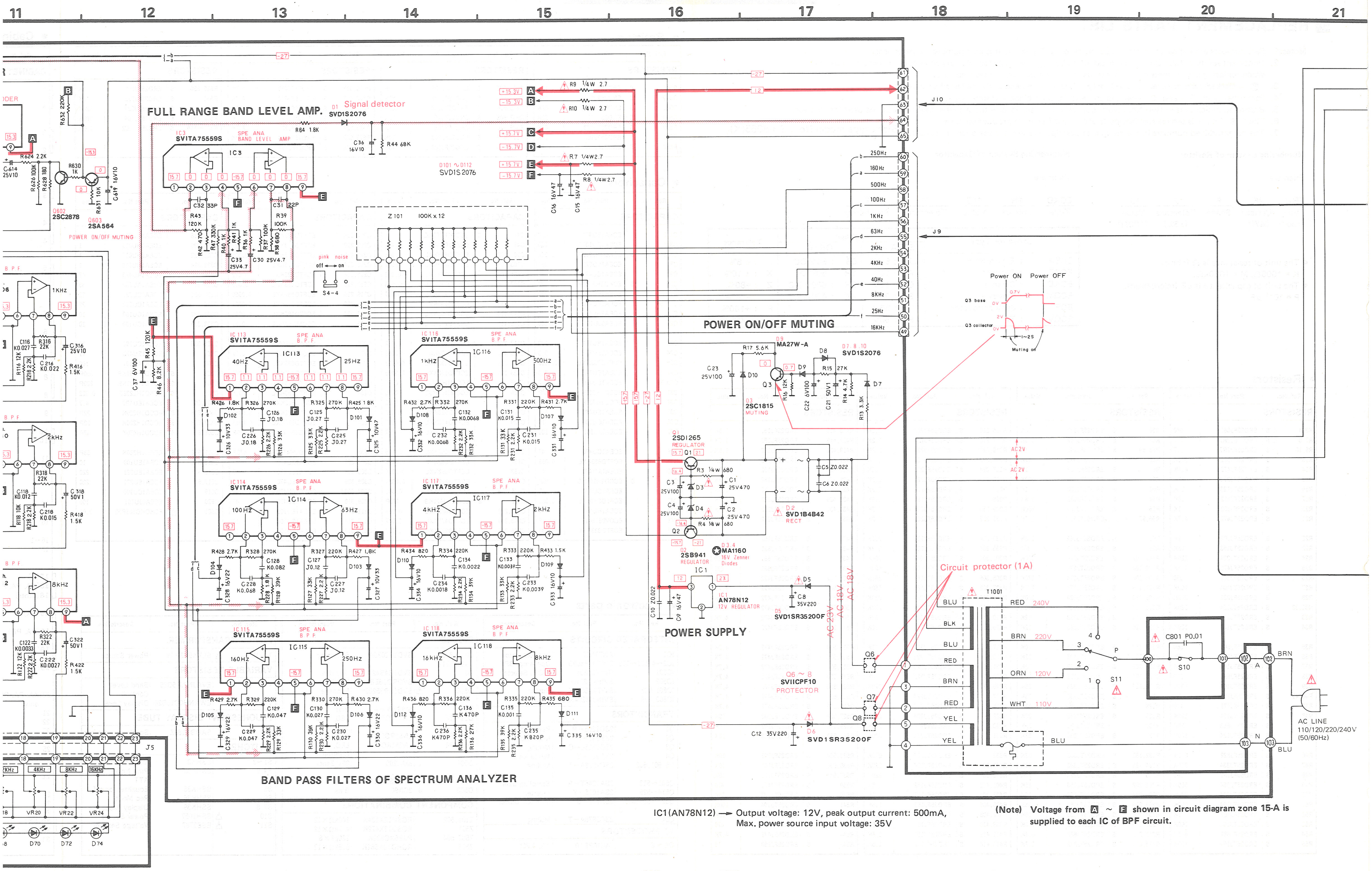
7
8
A
B
C
D
E
F
LINE IN
LINE OUT
TAPE 1
REC OUT
PLAYBACK
TAPE 2
REC OUT
PLAYBACK
L
R
R641 1.5K
R642
R643 1.5K
R644
R645 1.5K
R646
C620 6V100
Input selector
source
off ←→ on
S1-1
S1-2
tape 1
tape 1▸2
S2-1
S2-3
S2-2
S2-4
tape 2
tape 2▸1
S3-1
S3-3
S3-2
S3-4
pink noise
S4-1
S4-2
EQ
S5-1
S5-3
S5-2
S5-4
R633 100K
R634 100K
rec mode
straight ←→ EQ
S6-1
S6-2
R31 120K
R32 120K
S7-1
S7-2
display mode (L)
S8-1
S8-2
display mode (R)
Mixing signal of L ch. and R ch.
Mic signal
MIC
J3
ADDER
MIC AMP.
IC2
SVITA75559S
ADDER / MIC AMP
C29 25V4.7
R33 270K
R34 100K
C24 25V3.3
R24 220K
C27 25V3.3
R20 1K
R22 1K
R23 15K
R26 560
R25 4.7K
R27 100K
R28 2.2K
C25 K0.0033
R21 4.7K
Muting
0dB ←→ 20dB
S9-1
S9-2
mic attenuator
J4
VR25 20KB
R35 560
Display level control
IC4
SVITA75559S
PINK NOISE OSC
PINK NOISE GENERATOR
C48 25V4.7
C47 K10P
R61 1K
R60 47K
Q5
R62 100K
R63 1K
R59 1K
C46 K0.033
R58 1K
R57 3.3K
R56 330
R51 100K
R53 100K
C41 K10P
C42 16V47
R52 1K
R55 100K
R54 6.8K
R66 100K
C45 0.8
C44 50V1
C43 K0.082
C40 10V47
R50 330K
R49 560K
C39 K0.068
R48 1/2W180
C38 16V47
Q4
2SA921
NOISE OSC
S4-3
off ←→ on
pink noise
Q5
2SC2878
POWER ON/OFF MUTING
R96 1/2W2.2K
R97 1/2W2.2K
R98 1/2W1.8K
S1-3
S2-5
S2-6
S3-5
S5-5
S5-6
J12
J11
D11
D12
D13
D14
D15
D16
source
tape 1
tape 2
D11~16 LN41YCPH
D17
D18
EQ
D17, 18 LN81RCPH
INVERTER
BUFFER
SUBTRACTOR
ADDER
INVERT
IC601
SVITA75559S
INVERTER / BUFFER
Lch. IC601
C607 K22P
R613 10K
R611 10K
C601 25V4.7
R601 1K
R603 68K
R605 100K
R607 100K
C605 K22P
R609 6.8K
IC603
SVINJM2043SE
SUBTRACTOR / ADDER
Lch. IC603
C609 K47P
R617 4.7K
R615 4.7K
C615 25V220
C613 25V10
R623 2.2K
C611 K33P
R619 4.7K
R621 4.7K
C617 25V220
R625 100K
R627 180
R629 1K
Q601
2SC2878
POWER ON/OFF MUTING
IC602
SVITA75559
C608 K22P
R614 10K
R612 10K
BAND PASS FILTERS (L ch.)
IC101
SVITA75559S
BPF
Lch. IC101
25Hz
40Hz
R301 560K
C301 25V47
C101 K0.068
C103 K0.047
R303 560K
C303 25V47
R401 1.5K
C201 K0.068
R201 15K
R101 270K
R103 270K
R203 15K
C203 K0.047
R403 1.5K
IC107
Lch. IC107
1KHz
500Hz
C315 25V10
R315 22K
C115 K0.027
C113 K0.056
R313 22K
C313 25V10
R415 1.5K
C215 K0.022
R215 2.2K
R115 12K
R113 12K
R213 2.2K
C213 K0.047
R413 1.5K
C304 25V47
R404 1.5K
IC103
Lch. IC103
63Hz
100Hz
C305 25V47
R305 560K
C105 K0.033
C107 K0.018
R307 560K
C307 25V47
R405 1.5K
C205 K0.027
R205 15K
R105 270K
R107 270K
R207 15K
C207 K0.018
R407 1.5K
IC109
Lch. IC109
2KHz
4KHz
C317 50V1
R317 22K
C117 K0.012
C119 K0.0068
R319 22K
C319 50V1
R417 1.5K
C217 K0.015
R217 2.2K
R117 10K
R119 12K
R219 2.2K
C219 K0.0056
R419 1.5K
C308 25V47
R408 1.5K
IC105
Lch. IC105
250Hz
160Hz
C311 25V10
R311 220K
C111 K0.018
C109 K0.027
R309 220K
C309 25V47
R411 1.5K
C211 K0.015
R211 6.8K
R111 120K
R109 120K
R209 6.8K
C209 K0.027
R409 1.5K
IC111
Lch. IC111
8KHz
16KHz
C321 50V1
R321 22K
C121 K0.0033
C123 K0.0015
R323 22K
C323 50V1
R421 1.5K
C221 K0.0027
R221 2.2K
R121 12K
R123 10K
R223 2.2K
C223 K0.0018
R423 1.5K
C310 25V47
R410 1.5K
J8
J7
25Hz
40Hz
63Hz
100Hz
160Hz
250Hz
500Hz
1KHz
2KHz
4KHz
8KHz
16KHz
VR1~VR24 200KB
VR1
VR3
VR5
VR7
VR9
VR11
VR13
VR15
VR17
VR19
VR21
VR23
R99 100
D51
D53
D55
D57
D59
D61
D63
D65
D67
D69
D71
D73
D51~74 LN251RCPP
BAND LEVEL CONTROLS (L ch.)
A
B
C
D

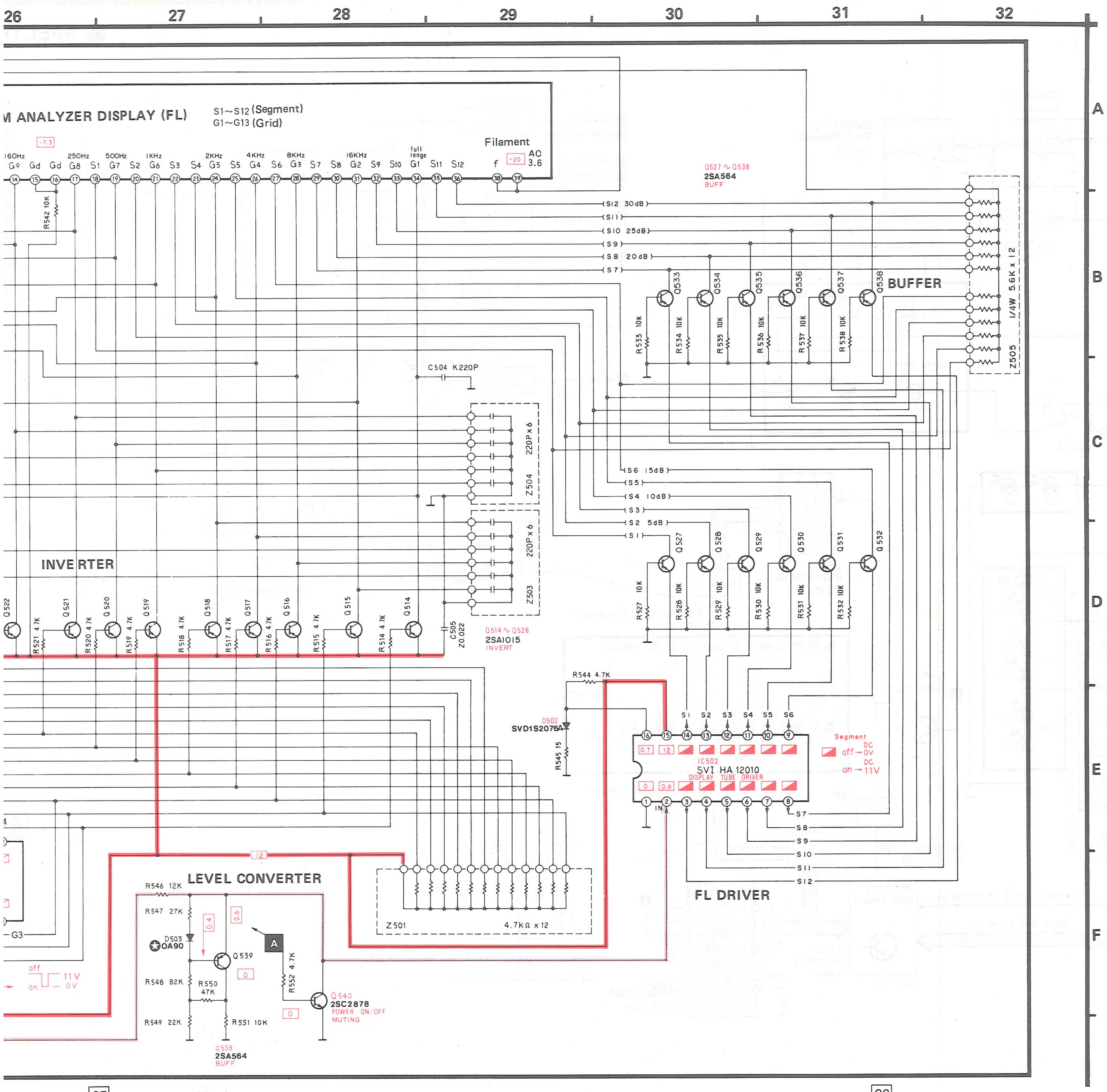


BUFFER
SUBTRACTOR
ADDER
INVERTER
BUFFER
SUBTRACTOR
ADDER
IC603 SVINJM2043SE SUBTRACTOR / ADDER
IC602 SVITA75559S INVERTER/BUFFER
IC604 SVINJM2043SE SUBTRACTOR/ADDER
Q601 2SC2878 POWER ON/OFF MUTING
Q602 2SC2878
Q603 2SA564 POWER ON/OFF MUTING
FULL RANGE BAND LEVEL AMP.
Signal detector
D1 SVD1S2076
IC3 SVITA75559S SPE ANA BAND LEVEL AMP
D101 ~ 0112 SVD1S2076
Z101 100K x 12
pink noise
off on
S4-4
BAND PASS FILTERS (L ch.)
BAND PASS FILTERS (R ch.)
IC101 SVITA75559S BPF
IC107 SVITA75559S BPF
IC102 SVITA75559S BPF
IC106 SVITA75559S BPF
IC103 SVITA75559S BPF
IC109 SVITA75559S BPF
IC104 SVITA75559S BPF
IC110 SVITA75559S BPF
IC105 SVITA75559S BPF
IC111 SVITA75559S BPF
IC108 SVITA75559S BPF
IC112 SVITA75559S BPF
IC113 SVITA75559S SPE ANA BPF
IC116 SVITA75559S SPE ANA BPF
IC114 SVITA75559S SPE ANA BPF
IC117 SVITA75559S SPE ANA BPF
IC115 SVITA75559S SPE ANA BPF
IC118 SVITA75559S SPE ANA BPF
40Hz 63Hz 100Hz 160Hz 250Hz 500Hz 1KHz 2KHz 4KHz 8KHz 16KHz
25Hz 40Hz 63Hz 100Hz 160Hz 250Hz 500Hz 1KHz 2KHz 4KHz 8KHz 16KHz
J8 J7 J6 J5
VR3 VR5 VR7 VR9 VR11 VR13 VR15 VR17 VR19 VR21 VR23
VR2 VR4 VR6 VR8 VR10 VR12 VR14 VR16 VR18 VR20 VR22 VR24
D53 D55 D57 D59 D61 D63 D65 D67 D69 D71 D73
D52 D54 D56 D58 D60 D62 D64 D66 D68 D70 D72 D74
R99 100
LN251RCPP
BAND LEVEL CONTROLS (L ch.)
BAND LEVEL CONTROLS (R ch.)
BAND PASS FILTERS OF SPECTRUM ANALYZER
Q1 2SD1265 REGULATOR
Q2 2SB941 REGULATOR
IC1
POWER SUP
POW
IC1(AN78N12)
6 7 8 9 10 11 12 13 14 15 16


11
12
13
14
15
16
17
18
19
20
21
FULL RANGE BAND LEVEL AMP.
Signal detector
D1 SVD1S2076
IC3 SVITA75559S
SPE ANA BAND LEVEL AMP
Q602 2SC2878
Q603 2SA564
POWER ON/OFF MUTING
D101 ~ D112 SVD1S2076
Z101 100K x 12
pink noise off ↔ on
S4-4
IC113 SVITA75559S SPE ANA B P F
IC116 SVITA75559S SPE ANA B P F
IC114 SVITA75559S SPE ANA B P F
IC117 SVITA75559S SPE ANA B P F
IC115 SVITA75559S SPE ANA B P F
IC118 SVITA75559S SPE ANA B P F
BAND PASS FILTERS OF SPECTRUM ANALYZER
POWER ON/OFF MUTING
J10
J9
250Hz
160Hz
500Hz
100Hz
1KHz
63Hz
2KHz
4KHz
40Hz
8KHz
25Hz
16KHz
Power ON
Power OFF
Q3 base
Q3 collector
Muting on
D9 MA27W-A
D7, 8, 10 SVD1S2076
Q3 2SC1815 MUTING
Q1 2SD1265 REGULATOR
Q2 2SB941 REGULATOR
D3, 4 MA1160 16V Zener Diodes
D2 SVD1B4B42 RECT
IC1 AN78N12 12V REGULATOR
D5 SVD1SR35200F
D6 SVD1SR35200F
Q6 ~ 8 SVIICPF10 PROTECTOR
POWER SUPPLY
Circuit protector (1A)
T1001
C801 P0,01
S10
S11
AC LINE 110/120/220/240V (50/60Hz)
BLU
BLK
RED
BRN
YEL
ORN
WHT
RED 240V
BRN 220V
ORN 120V
WHT 110V
AC 23V
AC 18V
AC 2V
J5
VR20
VR22
VR24
D70
D72
D74

IC1(AN78N12) ⟶ Output voltage: 12V, peak output current: 500mA, Max. power source input voltage: 35V

(Note) Voltage from A ~ F shown in circuit diagram zone 15-A is supplied to each IC of BPF circuit.


26
27
28
29
30
31
32
A
B
C
D
E
F
M ANALYZER DISPLAY (FL)
S1~S12 (Segment)
G1~G13 (Grid)
Filament
AC 3.6
160Hz
250Hz
500Hz
1KHz
2KHz
4KHz
8KHz
16KHz
full range
Q527 ∿ Q538
2SA564
BUFF
S12 30dB
S11
S10 25dB
S9
S8 20dB
S7
BUFFER
1/4W 5.6K x 12
Z505
C504 K220P
220P x 6
Z504
Z503
S6 15dB
S5
S4 10dB
S3
S2 5dB
S1
INVERTER
Q514 ∿ Q526
2SA1015
INVERT
C505
Z0.022
R544 4.7K
D502
SVD1S2076A
R545 15
IC502
SVI HA 12010
DISPLAY TUBE DRIVER
Segment
off → 0V
on → 11V
FL DRIVER
LEVEL CONVERTER
R546 12K
R547 27K
D503
OA90
Q539
R548 82K
R550 47K
R549 22K
R551 10K
R552 4.7K
Q540
2SC2878
POWER ON/OFF
MUTING
Q539
2SA564
BUFF
Z501
4.7kΩ x 12
off
on
11V
0V

SCHEMATIC DIAGRAM Ⓑ

(This schematic diapram may be modified at any time with the development of new technology.)

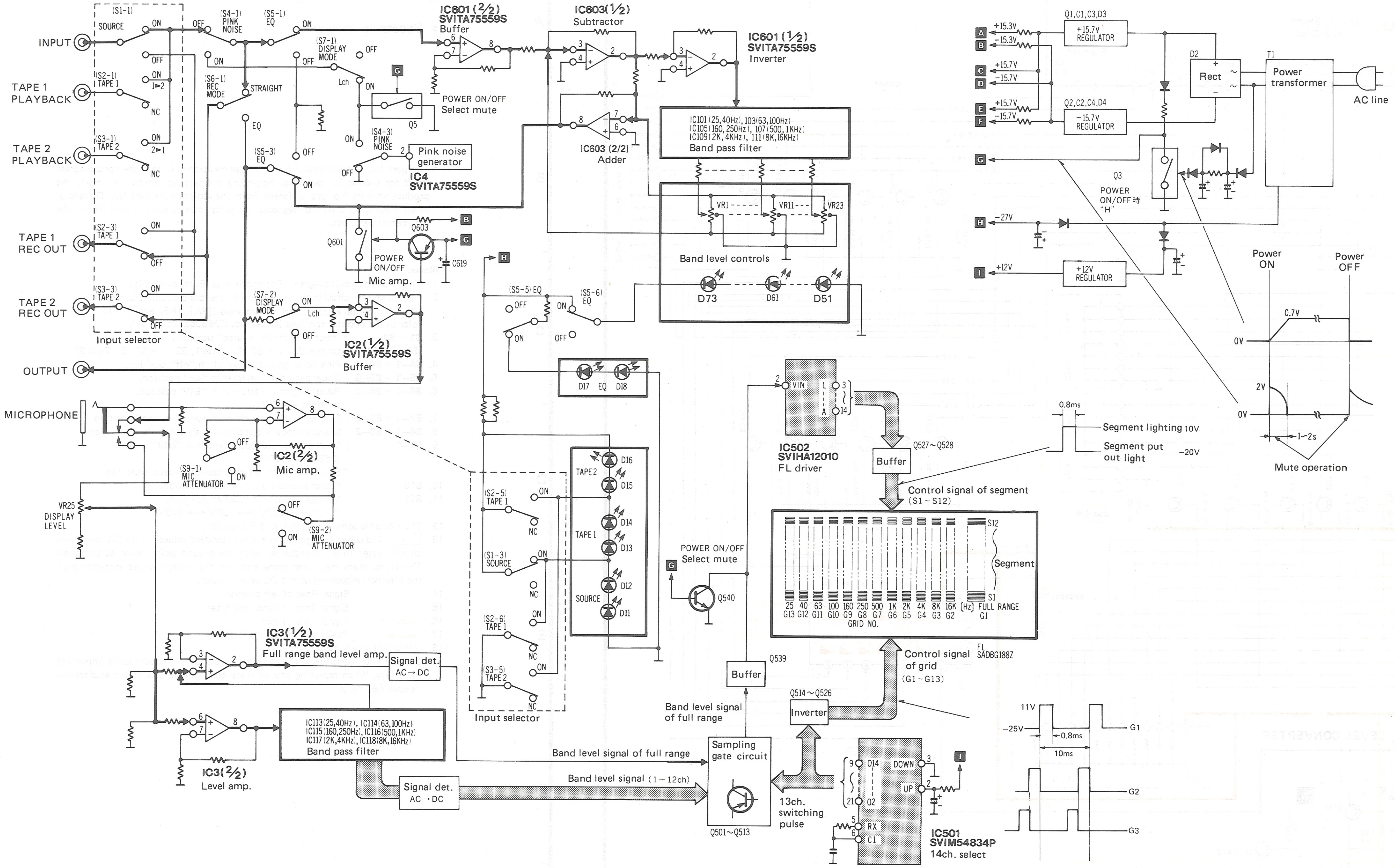
- **Spectrum analyzer**

- The part No. of transistros, IC and diodes mentioned in the schematic diagram stand for production part No. Regarding the part No. whith ✪ mark, the production part No. are different from the replacement part No. Therefore, when placing an order for replacement parts, pleases use the part No. in the replacemnt parts list.

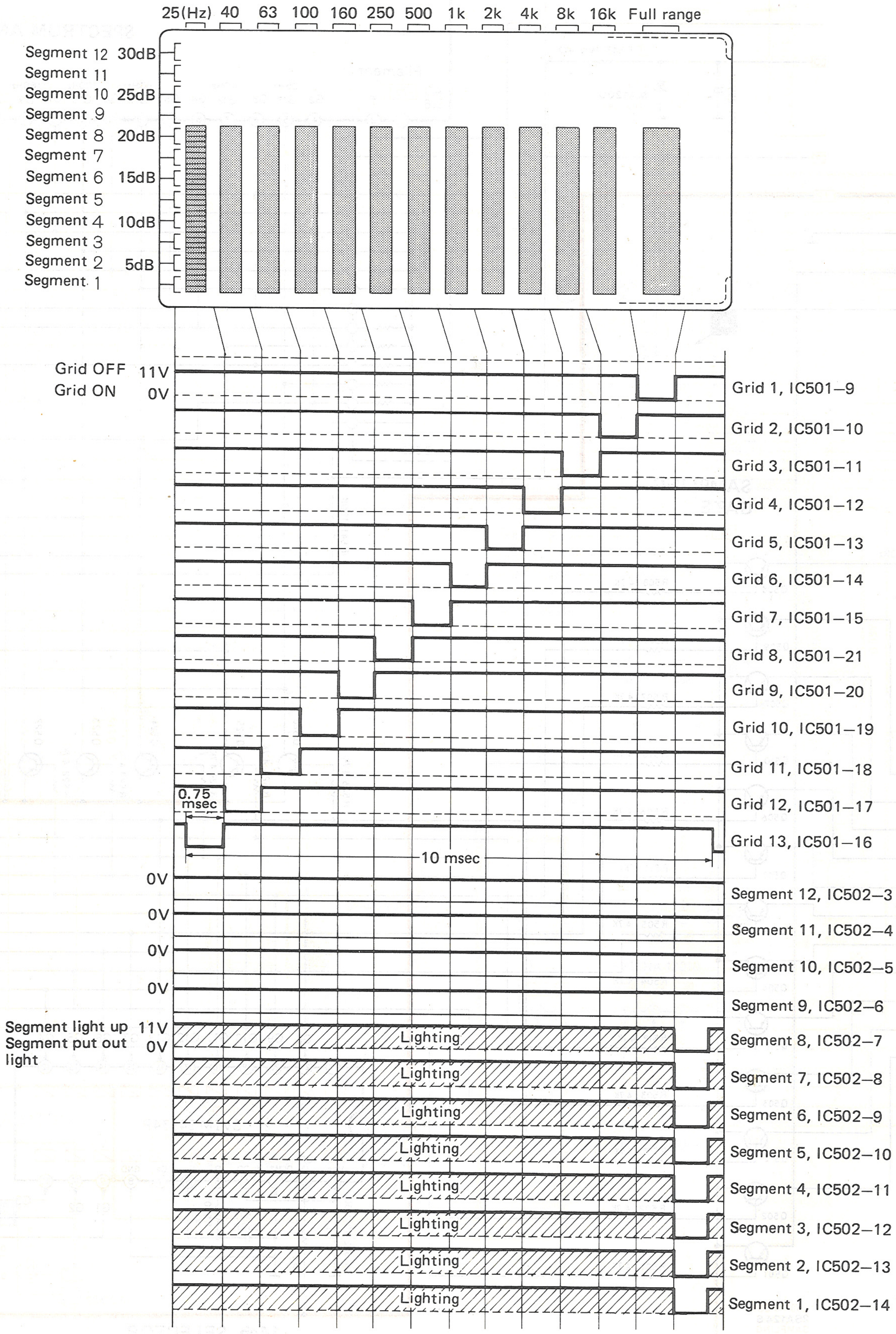
Notes:

1. This is basic circuit diagram (For continental Europe) of this unit.
2. Regarding the circuits to be changed in the basic circuit diagram (For continental Europe) and related areas ([PA], [PE] and [XA]) refer to the booklet contains (Order No. SD83062526C9–A).
3. **S1 ~ S3** : Input selector in **"source"** position.
   (S1–1 ~ S1–3 : source, S2 - 1 ~ S2 - 6 : Tape 1, S3 -1 ~ S3 -5 : Tape 2)
4. **S4–1 ~ S4–2** : Pink noise generator switch in **"off"** position.
5. **S5–1 ~ S5–6** : Equalizer on/off selector in **"on"** position.
6. **S6–1 ~ S6–2** : Recording mode selector in **"EQ"** position.
   (straight ←→ EQ)
7. **S7–1 ~ S7–2** : Display mode (left channel) switch in **"on"** position.
8. **S8–1 ~ S8–2** : Display mode (right channel) siwtch in **"on"** position.
9. **S9–1** : Microphone attenuator switch in **"0dB"** position.
   (0dB ←→ –20dB)
   * S9–2 is muting switch incase attenuator selection.
10. **S10** : Power source switch in **"on"** position.
11. **S11** : Voltage selector in **"220V"** position.
    (110V ←→ 120V ←→ 220V ←→ 240V)
12. The circuit is same for both L and R channels.
13. ☐ Indicated voltage values are the standard values for the DC electronic circuit tester (high impedance) with the ground point taken as standard. Therefore, there may exist some errors in the voltage volues, depending on the internal impedance of the DC circuit tester.
14. ⇨ Signal lines of left channel.
15. ⇨ Signal lines of band pass filter.
16. ⇨ Signal lines of mic.
17. ▬ Positive (+B) voltage lines.
18. Important safety notice:
    Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

■ BLOCK DIAGRAM


INPUT
TAPE 1 PLAYBACK
TAPE 2 PLAYBACK
TAPE 1 REC OUT
TAPE 2 REC OUT
OUTPUT
MICROPHONE
(S1-1) SOURCE
(S2-1) TAPE 1
(S3-1) TAPE 2
(S2-3) TAPE 1
(S3-3) TAPE 2
ON
OFF
1►2
2►1
NC
Input selector
(S4-1) PINK NOISE
(S5-1) EQ
(S6-1) REC MODE
STRAIGHT
EQ
(S7-1) DISPLAY MODE
Lch
Q5
POWER ON/OFF Select mute
(S4-3) PINK NOISE
Pink noise generator
IC4 SVITA75559S
(S5-3) EQ
IC601 (2/2) SVITA75559S Buffer
IC603 (1/2) Subtractor
IC601 (1/2) SVITA75559S Inverter
IC603 (2/2) Adder
IC101 (25,40Hz), 103 (63,100Hz)
IC105 (160,250Hz), 107 (500,1KHz)
IC109 (2K,4KHz), 111 (8K,16KHz)
Band pass filter
VR1
VR11
VR23
Band level controls
D73
D61
D51
Q601
Q603
POWER ON/OFF
Mic amp.
C619
(S7-2) DISPLAY MODE
IC2 (1/2) SVITA75559S Buffer
IC2 (2/2) Mic amp.
(S9-1) MIC ATTENUATOR
(S9-2) MIC ATTENUATOR
VR25 DISPLAY LEVEL
(S5-5) EQ
(S5-6) EQ
D17 EQ D18
D16
D15
TAPE 2
D14
D13
TAPE 1
D12
D11
SOURCE
(S2-5) TAPE 1
(S1-3) SOURCE
(S2-6) TAPE 1
(S3-5) TAPE 2
Input selector
IC3 (1/2) SVITA75559S
Full range band level amp.
Signal det. AC→DC
IC3 (2/2) Level amp.
IC113 (25,40Hz), IC114 (63,100Hz)
IC115 (160,250Hz), IC116 (500,1KHz)
IC117 (2K,4KHz), IC118 (8K,16KHz)
Band pass filter
Band level signal of full range
Band level signal (1~12ch)
Sampling gate circuit
Q501~Q513
13ch. switching pulse
IC501 SVIM54834P 14ch. select
DOWN
UP
RX
C1
Q14
Q2
Inverter
Q514~Q526
Band level signal of full range
Buffer
Q539
POWER ON/OFF Select mute
Q540
IC502 SVIHA12010 FL driver
VIN
Buffer
Q527~Q528
Control signal of segment (S1~S12)
S12
Segment
S1
25 40 63 100 160 250 500 1K 2K 4K 8K 16K (Hz) FULL RANGE
G13 G12 G11 G10 G9 G8 G7 G6 G5 G4 G3 G2 G1
GRID NO.
FL SADBG188Z
Control signal of grid (G1~G13)
0.8ms
Segment lighting 10V
Segment put out light -20V
11V
-25V
0.8ms
10ms
G1
G2
G3
+15.3V
-15.3V
+15.7V
-15.7V
Q1,C1,C3,D3
+15.7V REGULATOR
Q2,C2,C4,D4
-15.7V REGULATOR
D2
Rect
T1
Power transformer
AC line
Q3
POWER ON/OFF時 "H"
-27V
+12V
+12V REGULATOR
Power ON
Power OFF
0.7V
0V
2V
1~2s
Mute operation
A
B
C
D
E
F
G
H
I

SPECTRUM ANALYZER(FL) AND TIMING CHART


25(Hz)
40
63
100
160
250
500
1k
2k
4k
8k
16k
Full range
Segment 12 30dB
Segment 11
Segment 10 25dB
Segment 9
Segment 8 20dB
Segment 7
Segment 6 15dB
Segment 5
Segment 4 10dB
Segment 3
Segment 2 5dB
Segment 1
Grid OFF 11V
Grid ON 0V
Grid 1, IC501–9
Grid 2, IC501–10
Grid 3, IC501–11
Grid 4, IC501–12
Grid 5, IC501–13
Grid 6, IC501–14
Grid 7, IC501–15
Grid 8, IC501–21
Grid 9, IC501–20
Grid 10, IC501–19
Grid 11, IC501–18
Grid 12, IC501–17
Grid 13, IC501–16
0.75 msec
10 msec
0V
Segment 12, IC502–3
0V
Segment 11, IC502–4
0V
Segment 10, IC502–5
0V
Segment 9, IC502–6
Segment light up 11V
Segment put out light 0V
Lighting
Segment 8, IC502–7
Lighting
Segment 7, IC502–8
Lighting
Segment 6, IC502–9
Lighting
Segment 5, IC502–10
Lighting
Segment 4, IC502–11
Lighting
Segment 3, IC502–12
Lighting
Segment 2, IC502–13
Lighting
Segment 1, IC502–14

Printed in Japan
8306 11000 Ⓚ KK/IM Ⓙ

ORDER NO. HAD8510275P0

Parts Change Notice

Model No. SH–8055 [M, MC]
SH–8055 S/K [E, EK, EF, EB, EH, EGA, XA, XL]

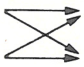
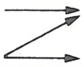
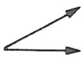
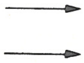
Service Manual
Order No. SD83062579C1
Order No. SD83062569C9

Please revise the original parts list in the Service Manual to conform to the change (s) shown herein. If new part numbers are shown, be sure to use them when orderring parts.

Reason for Change *The circled item indicates the reason. If no marking, see the Notes in the bottom column.

1. Improve performance
2. Change of material or dimension
3. To meet approved specification
4. Standardization
5. Addition
6. Deletion
7. Correction
8. Other

Interchangeability Code **The circled item Indicates the interchangeability. If no marking, see the Notes in the bottom column.

	Parts		Set Production	
A	Original New		Early Late	Original or new parts may be used in early or late production set. Use original parts until exhausted, then stock new parts.
B	Original New		Early Late	Original parts may be used in early production sets only. New parts may be used in early or late production sets. Use original parts where possible, then stock new parts.
C	Original New		Early Late	New parts only may be used in early or late production sets. Stock new parts.
D	Original New		Early Late	Original parts may be used in early production sets only. New parts may be used in late production sets only. Stock both original and new parts.
E	Other			

Part Number

Model No.	Ref. No.	Original Part No.	New Part No.	Notes (*'**)	Part Name & Descriptions	
CABINET and CHASSIS PARTS						
SH–8055	3	SGX75	SGX76	7, E	Ornament	1
	4	SGX76	SGX75	7, E	Ornament	1
SH–8055(S/K)	3	SGXK75	SGX76	7, E	Ornament	1
	3	SGX75–1	SGX76–1	7, E	Ornament	1
	4	SGX76	SGX75	7, E	Ornament	1
	4	SGX76–1	SGX75–1	7, E	Ornament	1

File this Parts Change Notice with your copy of the Service Manual.

Technics

Matsushita Service Company
50 Meadowland Parkway,
Secaucus,
New Jersey 07094

Panasonic Hawaii, Inc.
91-238 Kauhi St., Ewa Beach
P.O. Box 774
Honolulu, Hawaii 96808-0774

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

Panasonic Sales Company,
Division of Matsushita Electric
of Puerto Rico, Inc.
Ave. 65 De Infanteria, KM 9.7
Victoria, Industrial Park
Carolina, Puerto Rico 00630

Matsushita Electric
of Canada Limited
5770 Ambler Drive, Mississaugs,
Ontario, L4W 2T3

Printed in Japan
851000400 ⊗ IM

ORDER NO. HAD8507173A4

Service Manual

Stereo Graphic Equalizer
(With Spectrum Analyzer)

Equalizer
SH-8055

Color

(K) . . . . Black Type

Color	Area
(K)	[PA] . . . Far East PX
(K)	[PE] . . . European Military

Please use this manual together with the service manual for Model No. SH-8055, Order No. SD83062526C9.

CHANGE

REPLACEMENT PARTS LIST

Notes:

(1) Mentioned in this parts list are only those changed in Model No. SH–8055 for destination [PA, PE] area (silver type).

(2) Important safety notice:
Conponents identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

Ref. No.	Change of Parts No.		Part Name & Description	Per Set (Pcs.)	Remarks
	SH-8055 [PA,PE] **Silver Type**	→ **SH-8055** [PA,PE] **Black Type**			
RESISTORS					
R45	ERD25TJ124	ERD25TJ154	Carbon, 150kΩ, 1/4W, ±5%	1	
R539	ERD25FJ471	ERD25FJ561	Carbon, 560Ω, 1/4W, ±5%	1	Fig. 1
R556	————	ERD25FJ472	Carbon, 4.7kΩ, 1/4W, ±5%	1	Fig. 1
R643~646	ERD25FJ152	ERD25FJ222	Carbon, 2.2kΩ, 1/4W, ±5%	4	
CABINET and CHASSIS PARTS					
1	SGWK210PA	SGWK210BA	Front Panel	1	
2	SDUK8	SDUK8–1	Dial Plate	1	
3	SGXK75	SGXK75–1	Ornament Cover	1	
4	SGXK76	SGXK76–1	Ornament Cover	1	
5	SGUK10	SGUK10–1	Transparent Plate	1	
6	SGXK74	SGXK74–1	Sub Front Panel	1	
8	SBD69–3K	SBD69–1	Button, Display Level	1	
10	SBC475–1	SBC475	Button	4	
26	SKCK110S	SKCK110B	Cabinet	1	
SCREWS					
N1	XTB3+8B	XTB3+8BFZ	Screw, Panel M'tg.	3	
N12	SNE2095–2	SNE2095–5	Screw, Cabinet M'tg.	4	
PACKING PARTS					
P1	SPGK116	SPGK208	Carton Box	1	
P4	SPP699	SPPK47	Polyethylene Bag	1	

Technics

Panasonic Tokyo Office
Matsushita Electric Trading Co., Ltd.
1-2, 1-chome, Shiba-koen, Minato-ku, Tokyo 105 Japan

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

ADDITION OF RESISTOR

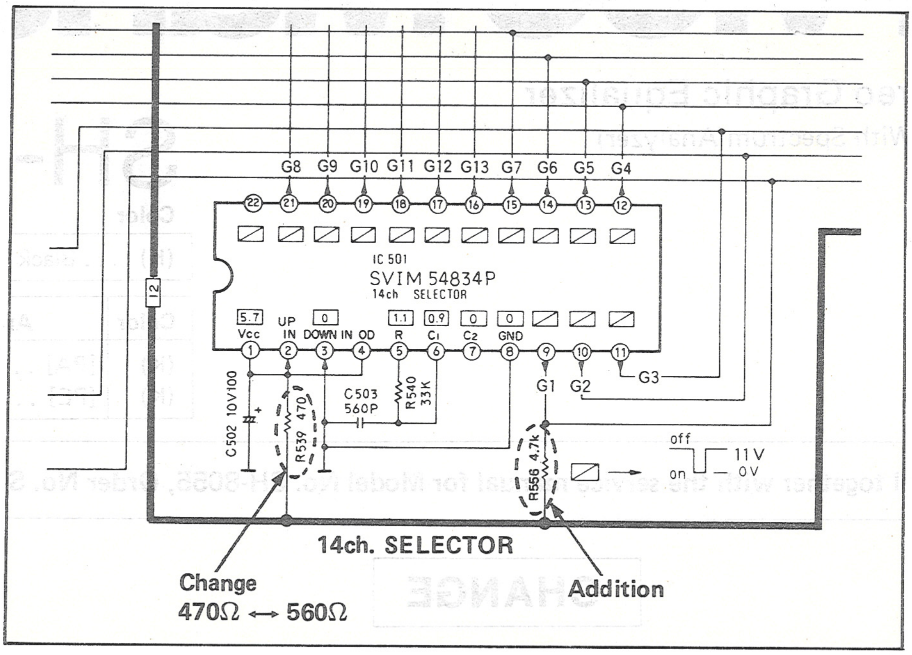

G8
G9
G10
G11
G12
G13
G7
G6
G5
G4
12
IC 501
SVIM 54834P
14ch SELECTOR
5.7
0
1.1
0.9
0
0
Vcc
UP IN
DOWN IN
OD
R
C1
C2
GND
G1
G2
G3
C502 10V100
R539 470
C503 560P
R540 33K
R556 4.7k
off
on
11V
0V
14ch. SELECTOR
Change
470Ω ↔ 560Ω
Addition

Fig. 1

POWER SOURCE CIRCUIT

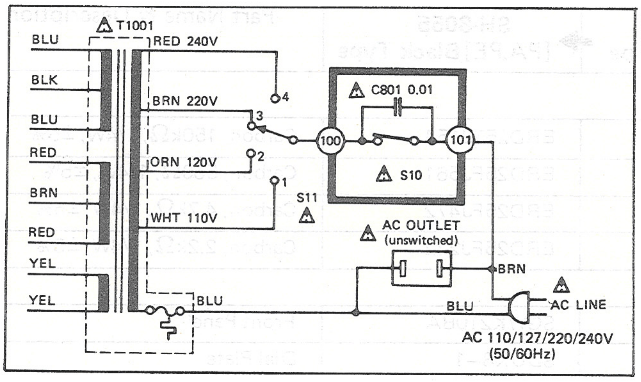

T1001
BLU
BLK
BLU
RED
BRN
RED
YEL
YEL
RED 240V
BRN 220V
ORN 120V
WHT 110V
BLU
4
3
2
1
S11
100
101
C801 0.01
S10
AC OUTLET
(unswitched)
BRN
BLU
AC LINE
AC 110/127/220/240V
(50/60Hz)

Fig. 2

Printed in Japan
850700830 Ⓚ KK

Stereo Graphic Equalizer SH-8055/SH-8055(K)

- This booklet contains the specifications for SH-8055, written in Germany, French and Spanish, and the circuits to be changed according to areas.
- File this manual together with the SH-8055 service manual (Order No. SD83062526C9).

- Das vorliegende Büchlein enthält die Spezifikationen für SH-8055 in deutscher, französischer und spanischer Sprache.
- Bewahren Sie das Büchlein zusammen mit der Bedienungsanleitung für SH-8055 (Bestell-Nr. SD83062526C9).

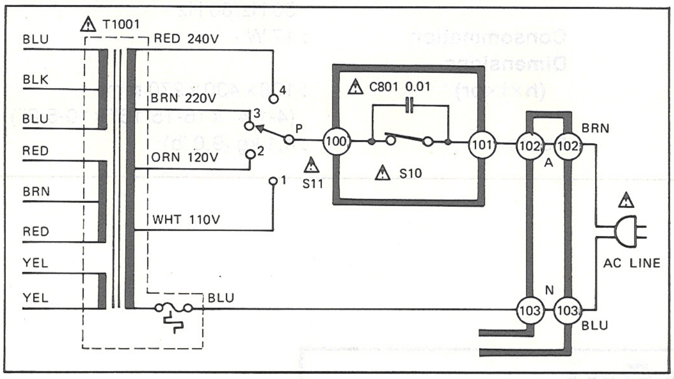
- Cette brochure contient les spécifications pour le SH-8055, écrites en allemand, en français et en espagnol.
- Classer ce manuel en même temps qu'avec le manuel de service du SH-8055 (N^{O} d'ordre : (SD83062526C9).

- Este librito contiene la especificaciones para SH-8055, escritos en alemán, francés y español.
- Guardar este manual juntamente con el manual de servicio de SH-8055 (Pedido N^{O}. SD83062526C9).

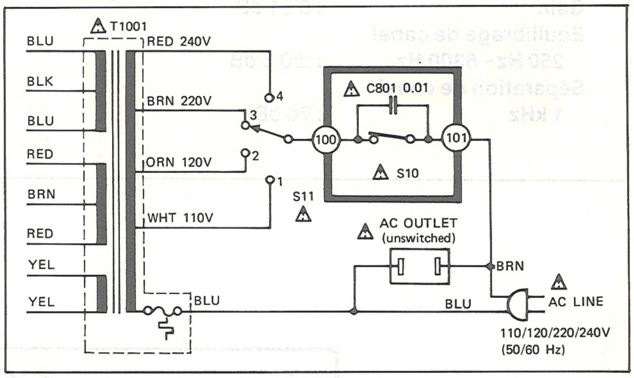
CHANGE OF SCHEMATIC DIAGRAM

- Power source

For continental Europe


T1001
BLU
BLK
BLU
RED
BRN
RED
YEL
YEL
RED 240V
BRN 220V
ORN 120V
WHT 110V
BLU
4
3
2
1
P
S11
C801 0.01
S10
100
101
102
102
A
N
103
103
BRN
BLU
AC LINE

For [XA], [PA] and [PE] areas


T1001
BLU
BLK
BLU
RED
BRN
RED
YEL
YEL
RED 240V
BRN 220V
ORN 120V
WHT 110V
BLU
4
3
2
1
S11
C801 0.01
S10
100
101
AC OUTLET
(unswitched)
BRN
BLU
AC LINE
110/120/220/240V
(50/60 Hz)

DEUTSCH

TECHNISCHE DATEN

(Spezifikationen Konnen infolge von Verbesserungen ohne Ankundigung geandert werden.)

(DIN 45 500)	
Frequenzgang (mittelstellung drehen)	: 5 Hz~100 kHz, −1 dB
Maximalausgangsspannung	: 8 V (1 kHz, THD 0,01%)
Nennausgangsspannung	: 1 V
Nennklirrfaktor	: 0,003% (20 Hz~20 kHz) 0,002% (1 kHz)
Eingangsspannung	: 1 V
Geräuschabstand	: 102 dB (110 dB, IHF, A)
Maximaleingangsspannung	: 8 V (1 kHz)
Eingangsimpedanz	: 47 kΩ
Verstärkung	: 0±1 dB
Kanalsymmetrie 250 Hz~6300 Hz	: ±0,5 dB
Kanaltrennung 1 kHz	: 70 dB
Frequenzgangregler	: +12 dB~−12 dB (12 Regler, stufenlos verstellbar)
Mittenfrequenzen	: 25 Hz, 40 Hz, 63 Hz, 100 Hz, 160 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz, 8 kHz, 16 kHz
Ausgangsspannung für rosa Rauschen	: 50 mV
Mikrofonempfindlichkeit	: über −74 dBV/μ bar (1 kHz)
Mikrofondämpfung	: −20 dB
ALLGEMEINE DATEN	
Stromversorgung	: Wechselstrom, 110 V/120 V/220 V/240 V, 50 Hz/60 Hz
Leistungsaufnahme	: 17 W
Abmessungen (H×B×T)	:108×430×270 mm (4-1/4"×16-15/16"×10-5/8")
Gewicht	: 4,1 kg (9,0 lb)

FRANÇAIS

CARACTERISTIQUES (Sujet a changement sans prearis.)

(DIN 45 500)

Réponse de fréquence (position centrale)	5 Hz~100 kHz, −1 dB
Tension de sortie maximale	8 V (1 kHz, THD 0,01%)
Tension de sortie nominale	1 V
Distortion harmonique total	0,003% (20 Hz~20 kHz) 0,002% (1 kHz)
Sensibilité d'entrée	1 V
Signal/Bruit	102 dB (110 dB, IHF' A)
Tension d'entrée maximale	8 V (1 kHz)
Impédance d'entrée	47 kΩ
Gain	0±1 dB
Equilibrage de canal 250 Hz~6300 Hz	±0,5 dB
Séparation de canal 1 kHz	70 dB
Commandes de niveau de gamme	+12 dB~−12 dB (12 éléments, continuellement variables)
Fréquences charnières	25 Hz, 40 Hz, 63 Hz, 100 Hz, 160 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz, 8 kHz, 16 kHz
Tension de sortie des bruits roses	50 mV
Sensibilité de microphone compatible	plus de −74 dBV/μbar (1 kHz)
Attenuateur de microphone	−20 dB

GENERALITES

Alimentation	CA. 110 V/120 V/220 V/240 V, 50 Hz/60 Hz
Consommation	17 W
Dimensions (h×l×pr)	108×430×270 mm (4-1/4"×16-15/16"×10-5/8")
Poids	4,1 kg (9,0 lb)

ESPAÑOL

ESPECIFICACIONES (Estas especificaciones estan sujetas a cualquier cambio sin previo eviso.)

(DIN 45 500)

Respouesta de frecuencia (posición central)	5 Hz~100 kHz, −1 dB
Tensión de salida máxima	8 V (1 kHz, THD 0.01%)
Tensión de salida de régimen	1 V
Distorsión armónica total nominal	0.003% (20 Hz~20 kHz) 0.002% (1 kHz)
Sensibilidad de entrada	1 V
Relación d señal ruido	102 dB (110 dB, IHF' A)
Tensión de entrada máxima	8 V (1 kHz)
Impedancia de entrada	47 kΩ
Ganancia	0±1 dB
Equilibrio de canales 250 Hz~6300 Hz	±0,5 dB
Separación de canales 1 kHz	70 dB
Controles de nivel de banda	+12 dB~−12 dB (12 elementos, continuamente variables)
Frecuencia central	25 Hz, 40 Hz, 63 Hz, 100 Hz, 160 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz, 8 kHz, 16 kHz
Voltaje de salida del ruido rosado	50 mV
Sensibilidad del micrófono compatible	por sobre −74 dBV/μbar (1 kHz)
Atenuador de micrófono	−20 dB

EN GENERAL

Alimentación de corriente	C.A. de 110 V/120 V/220 V/240 V, 50 Hz/60 Hz
Consumo de corriente	17 W
Dimensiones (alto×ancho×prof.)	108×430×270 mm (4-1/4"×16-15/16"×10-5/8")
Peso	4,1 kg (9,0 lb)

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